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ANNUAL

CATALOGUE

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U. S. Department of Agriculture

Machinery, Fertilizers, Seeds, Etc. 1918



C.M. WOOLF & CO. Inc.

1005 B. ST., NW.

WASHINGTON, D. C.

OUR CATALOGUE FOR 1918

GENERAL INFORMATION

How to Send Money—Remittances should be made either in the form of an Express Money Order, P. O. Money Order, Bank Draft or Registered Letter. 1c and 2c stamps will be accepted for small amounts, provided they are carefully wrapped, so as to prevent sticking.

Be Sure to Give Full Name and Address with each order. Every season we get a number of orders without name of sender or Post Office, and the postmark on the envelope is often too obscure to be made out. There is no way of finding out who the senders are; consequently we are blamed, whereas the fault is their own entirely. We therefore, beg our correspondents to write their full name and address on each order.

We prefer written orders, but when orders are given by telephone, they are accepted as understood, and at the risk of the purchaser, in case of misunderstanding in transmitting telephone orders.

Seeds by Mail—Since our last catalogue was printed, all Seeds, Bulbs, and Plants have been admitted to the Parcel Post rate of postage, and are now available at the same rate of postage as other merchandise. For full information and Parcel Post rates, see table below. Remember, however, that we pay the postage on all packets, ounces and one-quarter pounds at the price quoted in this catalogue.

Seeds by Express—Express rates have also been materially reduced since issuing our last catalogue, and on the average, express rates are now lower than Parcel Post rates to points beyond the third Zone, and when practical, we would advise customers to order goods shipped by Express, as it is far more satisfactory, quicker and safer. Goods ordered C. O. D. by Express must have 25 per cent. of the amount accompany the order. We do not make shipments by Freight C. O. D. to points where there is no bank.

POISONS AND LIQUIDS CANNOT BE SENT BY PARCEL POST

POUNDS	LOCAL	First Zone 1 to 50 Miles	Second Zone 50 to 150 Miles	Third Zone 150 to 300 Miles	Fourth Zone 300 to 600 Miles	Fifth Zone 600 to 1,000 Miles	Sixth Zone 1,000 to 1,400 Mi.	Seventh Zone 1,400 to 1,800 Mi.	Eighth Zone All over 1,800 Mi.
1	\$.05	\$.05	\$.05	\$.06	\$.07	\$.08	\$.09	\$.11	\$.12
2	.06	.06	.06	.08	.11	.14	.17	.21	.24
3	.06	.07	.07	.10	.15	.20	.25	.31	.36
4	.07	.08	.08	.12	.19	.26	.33	.41	.48
5	.07	.09	.09	.14	.23	.32	.41	.51	.60
6	.08	.10	.10	.16	.27	.38	.49	.61	.72
7	.08	.11	.11	.18	.31	.44	.57	.71	.84
8	.09	.12	.12	.20	.35	.50	.65	.81	.96
9	.09	.13	.13	.22	.39	.56	.73	.91	1.08
10	.10	.14	.14	.24	.43	.62	.81	1.01	1.20
11	.10	.15	.15	.26	.47	.68	.89	1.11	1.32
12	.11	.16	.16	.28	.51	.74	.97	1.21	1.44
13	.11	.17	.17	.30	.55	.80	1.05	1.31	1.56
14	.12	.18	.18	.32	.59	.86	1.13	1.41	1.68
15	.12	.19	.19	.34	.63	.92	1.21	1.51	1.80
16	.13	.20	.20	.36	.67	.98	1.29	1.61	1.92
17	.13	.21	.21	.38	.71	1.04	1.37	1.71	2.04
18	.14	.22	.22	.40	.75	1.10	1.45	1.81	2.16
19	.14	.23	.23	.42	.79	1.16	1.53	1.91	2.28
20	.15	.24	.24	.44	.83	1.22	1.61	2.01	2.40
21	.15	.25	.25						
22	.16	.26	.26						
23	.16	.27	.27						
24	.17	.28	.28						
25	.17	.29	.29						
26	.18	.30	.30						
27	.18	.31	.31						
28	.19	.32	.32						
29	.19	.33	.33						
30	.20	.34	.34						
31	.20	.35	.35						
32	.21	.36	.36						
33	.21	.37	.37						
34	.22	.38	.38						
35	.22	.39	.39						
36	.23	.40	.40						
37	.23	.41	.41						
38	.24	.42	.42						
39	.24	.43	.43						
40	.25	.44	.44						
41	.25	.45	.45						
42	.26	.46	.46						
43	.26	.47	.47						
44	.27	.48	.48						
45	.27	.49	.49						
46	.28	.50	.50						
47	.28	.51	.51						
48	.29	.52	.52						
49	.29	.53	.53						
50	.30	.54	.54						

Seeds, Bulbs and Plants have been admitted to the Parcel Post rate of postage, and are now carried at the same rate as other merchandise, with the exception that packages weighing up to 8 ounces are carried at the rate of 1c for each 2 ounces, regardless of distance. Remember, however, that prices quoted in this catalogue on packets, ounces and one-quarter pounds are postpaid, but when larger quantities are ordered sent by mail, add the required postage as per rate table to the left. When pounds are ordered, remit postage for 2 pounds; when 2 pounds are ordered, remit postage for 3 pounds; and so on, as the wrapping of the packages will make it run over the actual weight ordered. When figuring the amount of postage, if in doubt as to the exact amount required, remit even more than you think necessary, and we will return the amount not needed, as we cannot send packages postage collect, nor charge on our books small amounts due for postage stamps. When ordering pints, remit for postage on 1 pound mailing weight, and for quarts remit for 2 pounds mailing weight.

If you are in doubt as to what Zone you are in from Washington, ask your postmaster. The weight limit in the first and second Zones is 50 pounds; all other zones, 20 pounds.

Poisons and liquids cannot be sent by Parcel Post; these should be ordered sent by express or freight.

We appreciate the patronage you have given us during the past year. Our business is growing all the time. We attribute this to our efforts to furnish only high-grade seeds.

With Parcel Post rates now in effect you can easily get our Superior Seeds delivered at your home at most reasonable prices.

Send us your order.

VEGETABLE SEEDS

ASPARAGUS

German, Spargel French, Asperge Spanish, Esparragos

One ounce for 60 feet of drill.

CULTURE.—Will require about 3 years from time of sowing until the bed is in full bearing, but once established is good for 20 years. It should be sown in drills 1 foot apart, and when the plants are 4 or 5 inches high they should be thinned out so that the plants will be 9 inches apart from each other in all the rows. Great care must be taken for the first year to keep down all weeds. The deeper the soil and the more manure used the greater will be the crop.



Conover's Colossal.

CONOVER'S COLOSSAL.—The best known, and one of the most desirable sorts. Pkt. 5c; oz. 10c; ¼ lb. 15c; lb. 50c.

GIANT ARGENTEUIL.—New. A most promising variety, nearly twice the size of any other. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

PALMETTO.—Large, thick, dark green shoots with a distinctly pointed tip. Pkt. 5c; oz. 10c; ¼ lb. 15c; lb. 50c.

COLUMBIAN MAMMOTH WHITE.—This splendid new white variety is a sport from Conover's Colossal, and originated on Long Island. The shoots are pure white, and require no artificial blanching; brings a much higher price in market than any other sort. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb. 50c.

Asparagus Roots

A saving of one to two years is effected by planting roots. Those offered below are strong, two-year-old roots, and the proper size for setting.

	Per 100
Columbian Mammoth White	\$1 00
Conover's Colossal	75
Palmetto	1 00

BRUSSELS SPROUTS

(Species of Cabbage; Cultivation the Same)

German, Rosen-Kohl French, Chou de Bruxelles
Spanish, Berza de Brusels

One ounce will sow a bed of 40 square feet and produce about 3,000 plants.

CULTURE.—This is a delicious vegetable, superior to either borecole or spinach. The small, cabbage-like heads which grow upon the stem are much improved by a moderate frost. Sow in hot-beds in March or April, and in the open ground in May; cultivate same as broccoli.

Prices: Pkt., 5c; 1 oz., 20c.

BEANS

Dwarf or Bush

German, Bohnen French, Haricot Spanish, Frijole nano

One quart to 100 feet in drills; or 150 hills, 2 bushels to the acre in drills.

A succession of sowings can be made from the first week in May until September. These dates are for the latitude of New York; farther south the sowing must be done earlier; farther north, later. Plant in drills about 2 inches deep, and from 18 inches to 2 feet apart, according to the richness of the soil; the poorer the soil the closer they can be planted. The seeds should be dropped about 2 inches apart.

Wax-Pod or Butter Beans

Bush Varieties

BLACK GERMAN WAX. (Black seed.)—Very early; round, yellow pods; a well-known standard sort. Pt. 35c; qt. 60c; peck \$4.50.

CURRIE'S RUST-PROOF WAX.—Pods long, flat and straight; very productive and rust-proof; black seed. Pt. 35c; qt. 60c; peck \$4.50.

DAVIS WHITE KIDNEY WAX.—Pods remarkably long, straight and handsome, waxy white color; enormously productive; seed white. Pt. 35c; qt. 60c; peck \$4.50.

GOLDEN WAX.—Very popular; well-known standard sort. Pt. 35c; qt. 60c; pk. \$4.50.

HODSON WAX.—New; claimed to be rust-proof and very productive. Pods long, cream-yellow. Pt. 35c; qt. 60c; peck \$4.50.

KIDNEY WAX (Wardwell's).—Extra early; purely wax pods, long, flat and remarkably free from rust. Pt. 35c qt. 60c; peck \$4.50.

PROLIFIC DWARF BLACK WAX.—An improved strain of Black Wax of more vigorous habit and far more productive. Pods waxy yellow, with slightly curled point. Pt. 35c; qt. 60c; peck \$4.50.



Green Pod Bush Beans

BURPEE'S STRINGLESS GREEN POD.—New, extra early, prolific; entirely stringless; crisp, tender; fine quality. Pt. 30c; qt. 50c; peck \$3.50.

LONGFELLOW.—Early and prolific; pods long and very tender. Pt. 30c; qt. 50c; peck \$3.50.

HOPKINS' IMPROVED VALENTINE.—An improved strain of Round Pod Red Valentine. Pt. 30c; qt. 50c; peck \$3.75;

NAVY BEANS.—Used as dried winter beans. Pt. 30c; qt. 50c; peck \$3.50.

HORTICULTURAL DWARF.—Late and productive; pods showy; great favorite in New England; fine shell variety. Pt. 35c; qt. 60c; pk. \$4.50.

BLACK VALENTINE.—A distinct form of Valentine; of handsome appearance and excellent quality. Pt. 30c; qt. 50c; peck \$3.50.

Beans—Pole or Running

One quart to 150 hills; 10 to 12 qts. to the acre in drills.

These are more tender and require rather more care in culture than the Bush Beans, and should be sown two weeks later. They succeed best in sandy loams, which should be liberally enriched with short manure in the hills, which are formed, according to the variety, from 3 to 4 feet apart. From 5 to 6 seeds are planted in each hill, about 2 inches deep. As the matured Bean is used mostly, the season is too short for succession crops in the North, though it is advantageous to plant succession crops in the Southern States, where the season of growth is often from March to November. Rough cedar or similar poles about 7 or 8 feet high should be used for Lima Beans to climb on. They should be set in the ground at least 18 inches, so as to prevent being blown over.

CUT SHORT, or CORN HILL.—A speckled Bean, used for planting among corn. Pt. 30c; qt. 50c; pk. \$3.50.

KENTUCKY WONDER.—Fine green pod sort; early and productive; entirely stringless. Pt. 30c; qt. 50c; peck \$3.50.

KING HORTICULTURAL.—Pods bright carmine color, and both beans and pods are much larger than the common kind. Pt. 30c; qt. 50c; peck \$3.00.

LAZY WIFE.—Beans white; pods green and entirely stringless; produces an enormous quantity of pods. Pt. 40c; qt. 75c; peck \$5.00.

Pole Lima Beans

LIMA, KING OF THE GARDEN.—Heavy cropper; bean and pod very large. Pt. 30c; qt. 50c; pk. \$3.75.

LIMA, SEIBERT'S EARLY.—The earliest and one of the best for home or market garden. The green-shelled beans are of immense size, but so tender that they shrink in drying to about the size of the large white Lima. Pt. 35c; qt. 60c; pk. \$4.25.

BURPEE IMPROVED BUSH LIMA.—Pods and beans are extremely large. Plant grows more erect than Burpee's Bush Lima and is more productive. Pt. 30c; qt. 60c; pk. \$4.25.

LEVIATHAN.—The earliest Pole Lima grown. The plant is strong and takes to the poles more readily than any other sort. It is fully a week earlier than any other Pole variety, therefore can be grown successfully where other sorts would be caught by frosts of early autumn. Moreover it is a prodigious cropper, producing its pods in large clusters from base to top of pole, frequently from 5 to 10 together. Pt. 30c; qt. 60c; pk. \$4.25.

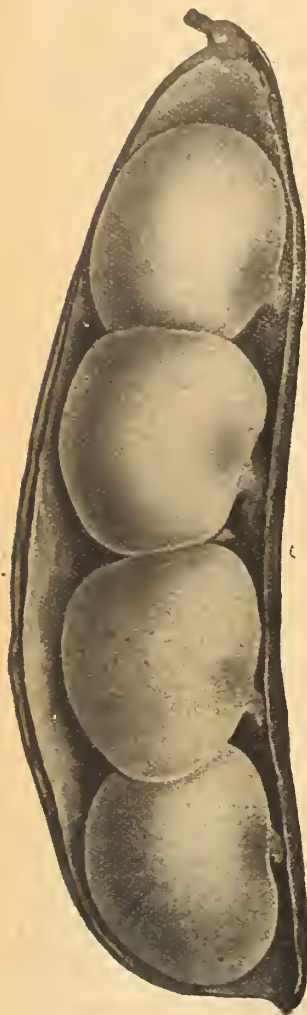
LIMA, LARGE WHITE.—Extra large size. Selected stock. Beans very large. Pt. 30c; qt. 60c; pk. \$4.25.

BUSH LIMA, HENDERSON'S.—Beans smaller than Burpee's or Dreer's, but very early and enormously productive. Pt. 30c; qt. 60c; pk. \$4.25.

FORDHOOK BUSH LIMA.—An improved type of Dreer's Bush Lima, excepting that it is also very much earlier. Pt. 30c; qt. 60c; pk. \$4.25.

BUSH LIMA, DREER'S.—Beans are similar to Dreer's Pole Lima, but ten days earlier and a true Bush Bean. Pt. 30c; qt. 60c; pk. \$4.25.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



King of the Garden



Lazy Wife



Crosby's Egyptian.

MANGEL-WURZEL

6 to 8 pounds of seed will sow an acre.

CULTURE.—The following varieties are extensively grown for feeding stock and are excellent food to increase the flow of milk. As they grow much larger than the varieties cultivated for table use, they require more room, and should be sown in drills about 2 feet apart. The seeds should be dropped about 2 inches apart in the drills, and when strong enough thinned out to 12 to 15 inches in the row. The long varieties are best suited to a deep soil, and the globe sorts succeed better than the long sorts on sandy soil.

GOLDEN TANKARD.—Best and most popular for dairy farming; a very large, yellow-fleshed sort, said to contain a large amount of sugar; grows largely above ground, is hardy and a heavy cropper. $\frac{1}{4}$ lb. 40c; $\frac{1}{2}$ lb. 75c; 1 lb. \$1.00.

LONG RED.—This is an old-fashioned long red Mangel. $\frac{1}{4}$ lb. 30c; $\frac{1}{2}$ lb. 50c; 1 lb. 75c.

CARROT

German, Mohre

French, Carotte

Spanish, Zamahoria

One ounce will sow 100 feet of drill; 3 pounds required for an acre.

CULTURE.—Carrots require a very finely pulverized soil to grow them to perfection. A good, light and well-enriched sandy loam is the best for this crop. For field culture, sow in drills 3 to $3\frac{1}{2}$ feet apart, so as to cultivate by horse. Market-gardeners sow in drills, about 18 inches apart, and cultivate by hand. For early crops cover $\frac{1}{2}$ inch deep, and thin to six inches apart in the row; for late cover $\frac{3}{4}$ inch deep, and thin to four inches.

EARLY SCARLET HORN.—A very popular sort; quick-growing; deep orange in color; blunt-rooted; 6 to 8 inches in length. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; $\frac{1}{2}$ lb. \$1.00; 1 lb. \$1.75.

BEET

German, Kuntelrube

French, Betterave

Spanish, Bettaraga

One ounce to 50 feet of drill; 5 to 6 pounds to the acre in drills.

The soil which is best suited is that which is rather light and thoroughly enriched with manure. For an early supply, sow in Spring as soon as the ground becomes fit to work, in drills about 1 foot apart and 2 inches deep. For main crop, sow the first week in May, and for Winter use sow in June.

BASSANO, EARLY FLAT.—An early, tender variety; color light red. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

CROSBY'S EGYPTIAN.—The best for early market; is early as the original strain of Egyptian, is thicker and less inclined to push up a woody stock as it advances in growth. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.75.

EARLY BLOOD TURNIP.—One of the best known and most popular early sorts; smooth and dark red; excellent quality. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

ECLIPSE BLOOD TURNIP.—Very early, round, smooth and dark red. Our strain of this variety is very select; it has a very small top, and is one of the best for market. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.25.

DETROIT DARK RED.—Round; skin dark red; flesh light red, very sweet. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; sweet. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

DEWING'S EARLY BLOOD TURNIP.—An improved variety of deep blood red color, fine form and flavor; a favorite market sort. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.25.



Improved Long Orange.

IMPROVED LONG ORANGE.—The best known and most largely cultivated of any carrot; excellent for stock or table use; roots deep orange, 12 to 15 inches long. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; $\frac{1}{2}$ lb. \$1.00; 1 lb. \$1.75.

DANVERS HALF-LONG.—One of the heaviest croppers; roots dark orange color, 8 to 10 inches in length, thick, and ending in a somewhat abrupt point; first class for all soils. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; $\frac{1}{2}$ lb. \$1.00; 1 lb. \$1.75.

OXHEART, or GUERANDE.—Roots short and very thick, and intermediate between Scarlet Horn and Chantenay; color, deep orange; fine-grained and sweet; easily dug; annually grows in favor. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; $\frac{1}{2}$ lb. \$1.00; 1 lb. \$1.75.

CABBAGE

German. Kohl

Spanish, Berza de repollo

French, Chou

One ounce will produce 3,000 plants.

CULTURE.—Soil for Cabbage should be rich and heavy loam, with good drainage. On such a soil, with an abundance of stable manure, excellent crops are sure to be grown. For early spring, sow in fall, not too early, or the plants are liable to bolt in the spring instead of heading. In a month the plants will be fit to transplant to coldframes, where they are wintered, taking care in planting to set the young plants down to the first leaves. Transplant in spring as soon as the ground can be worked, setting the plants 2 feet apart one way and from 12 to 18 inches the other, according to the variety. If it is desirable to economize space, lettuce or radish may be sown between the rows, as they will be out of the way before the Cabbage needs the room. For late or winter crops, the seed is sown in May and the plants set out in July. In this case they are set in rows 2x3 feet, so as to work them with a horse and cultivator. To prevent the turnip-flea from attacking the young plants, sift the air-slacked lime or tobacco-dust over them as soon as they appear above ground.

ALL-SEASONS.—Heads very deep; can be planted for early or late crop, and is a splendid keeper; about as early as Early Summer, but forming much larger heads. Pkt. 5c; oz. 35c; ¼ lb. \$1.00; 1 lb. \$3.75.

EXCELSIOR LATE FLAT DUTCH.—A very valuable late variety; for main winter crop has no equal; sure header, fine keeper. Pkt. 5c; oz. 30c; ¼ lb. 75c; 1 lb. \$3.00.

CHARLESTON LARGE WAKEFIELD.—Popular with market-gardeners in the South. This strain is about one week later than the Early Jersey Wakefield, but the heads are fully one-half larger; will not burst when ripe like most early sorts, and can be left standing in the field some time without damage. Pkt. 5c; oz. 35c; ¼ lb. \$1.50; 1 lb. \$4.50.

RED ROCK (Henderson Mammoth).—The largest and surest heading red Cabbage. Heads as large and solid as Flat Dutch, and fine-grained. Pkt., 5c; oz., 50c; ¼ lb., \$1.50; 1 lb., \$5.00.

RICE'S SELECTED EARLY JERSEY WAKEFIELD.—This is the most widely known and popular early variety. Heads are cone-shaped and very solid. Pkt. 5c; oz. 35c; ¼ lb. \$1.50; 1 lb. \$4.50.

HENDERSON'S EARLY SUMMER CABBAGE.—A splendid Second Early Cabbage, large, round, flat heads, 8 to 10 pounds each. As an ideal second early Cabbage it continues to hold its place. It forms large, flat, round, solid heads, weighing usually 8 to 10 lbs. each. The quality is excellent, tender and sweet. It comes in about ten days later than Early Jersey Wakefield, but is more than double in weight. Pkt., 5c; oz. 35c; ¼ lb. \$1.25; 1 lb. \$4.50.



Charleston Large Wakefield.

DANISH BALLHEAD.—One of the very best winter sorts; heads round and very solid. Pkt. 5c; oz. 40c; ¼ lb. \$1.50; 1 lb. \$5.00.

EARLY DWARF YORK.—A standard early English variety; heads small and heart-shaped. Pkt. 5c; oz. 35c; ¼ lb. \$1.25; 1 lb. \$4.00.

EARLY FLAT DUTCH.—Earlier and heads smaller than Late Flat Dutch; a good second-early, sure header, weighing 10 to 12 lbs.; valuable market sort. Pkt. 5c; oz. 35c; ¼ lb. \$1.25; 1 lb. \$4.00.

HENDERSON'S SUCCESSION.—One of the best of Cabbages; heads very large and somewhat flat; ten days later than Early Summer; much prized by gardeners. Pkt. 5c; oz. 35c; ¼ lb. \$1.25; 1 lb. \$4.00.

GREEN CURLED SAVOY, 80 DAYS.—This is undoubtedly the finest type of Winter Cabbage. After having been frosted it boils like marrow, and is not surpassed even by the Cauliflower in its best condition. The strain is not to be confounded with low-priced imported seeds. It is a shy producer of seed, and consequently never plentiful. Pkt. 5c; oz. 35c; ¼ lb. \$1.25; 1 lb. \$4.00.

RICE'S SUREHEAD.—All head and always sure to head. This very popular variety is rightly named Surehead, because it never fails to form a good solid head, even on poor soil, but the richer the soil the larger and finer the head; it is the finest late Cabbage in this country, and best for market. Heads the list for winter use. Pkt. 5c; oz. 35c; ¼ lb. \$1.25; 1 lb. \$4.00.

LARGE LATE DRUMHEAD.—Heads large, flat, solid, and a good keeper; planted for main crop for winter keeping. Pkt. 5c; oz. 35c; ¼ lb. \$1.25; 1 lb. \$4.00.

SWISS CHARD

The City Man's Garden

SWISS CHARD (The City Man's Garden).—Also called "Cut and Come Again" Spinach. This vegetable gives maximum returns for little care and space; it yields a constant crop from July to Winter. The leaves are used for greens the same as Spinach or beet tops; they are equal in quality and easier to prepare than spinach, and far superior to beets. Sow early in Spring, in rows 16 inches apart, and thin out to 6 inches apart in the rows. It can be used all Summer when spinach is not available. Later the leaves grow very large, with broad, flat, pure white stems, and mid-ribs, which may be cooked like Asparagus or made into very good pickles. As it grows, thin out for use and keep clear of weeds. Good cultivation increases the tenderness of the leaves.

LUCULLUS SWISS CHARD.—A new Moss Curled sort. Very large leaves. The mid-ribs are very broad and form a good substitute for asparagus during the Summer months. Pkt. 5c; oz. 15c; ¼ lb. 35c; 1 lb. \$1.00.



Swiss Chard.

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CAULIFLOWER

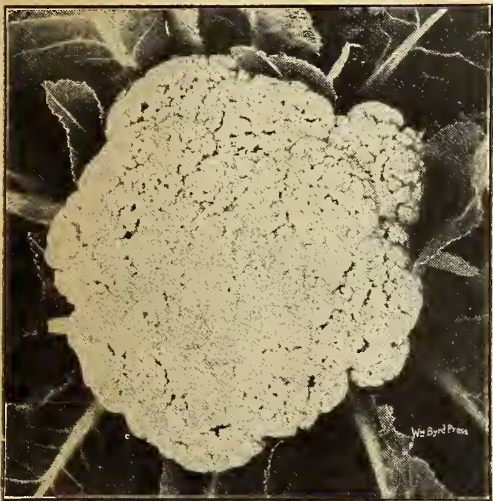
German, Blumentohl

Spanish, Coliflor

French, Choufleur

One ounce will sow a bed of 40 square feet, and produce about 3,000 plants.

CULTURE.—When grown to perfection this is a most delicious vegetable, and well repays generous treatment in cultivation. With a deep rich soil and an abundance of moisture, which in dry seasons must be applied artificially, Cauliflower can be grown well. The cultivation is similar to that of the cabbage. For early fall crops sow in May, and transplant in June, in rows of 4 feet apart, setting the plants 2 feet apart in the rows; water frequently if the ground is dry. Frequent hoeing and a liberal supply of rich liquid manure, to keep up a continuous and rapid growth, will produce splendid heads of the most delicate flavor. It facilitates blanching if the leaves are gathered loosely together and tied over the top of the head to protect from the sun. Cut before the flowers begin to open. Sow as late as June 20 for late crops, in beds or in hills, covering $\frac{1}{4}$ inch deep.



Henderson's Early Snowball.

DRY WEATHER CAULIFLOWER.

—During some seasons after a very late spring, hot weather comes on very quickly. In such a year this variety has proven itself of exceptional merit. Also in warm parts of the country, where there is not much cool weather, it is a most desirable sort. Very sure heading and second early. Heads larger than Snowball and snow white. Our seed is A1, and procured from the original grower in Denmark. Pkt., 25c; $\frac{1}{2}$ oz., \$1.00; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00.

HENDERSON'S EARLY SNOWBALL.—This is undoubtedly the finest

variety ever introduced; it is the earliest, and produces beautiful snow-white heads of the most delicious flavor. The seed we offer is pure and genuine, and sure to prove satisfactory. Pkt., 25c; $\frac{1}{2}$ oz., \$1.00; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00.

EXTRA SELECTED EARLY ER-FURT.—The finest strain of the Erfurt Cauliflower; almost as early as the Snowball; grows about 15 inches high, producing very solid, pure white heads of the very finest quality; seldom fails to form a good-sized head. Pkt., 25c; $\frac{1}{2}$ oz., \$1.00; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00.

CELERY

German, Sellerie

Spanish, Apio

French, Celeri

One ounce will produce 7,000 plants.

CULTURE.—Sow seeds in hotbeds or coldframe. As soon as the plants are about red bed in the border, setting them 4 or 53 inches high, transplant to a nicely prepared and fine, stocky plants, set them in the inches apart. When about 8 inches high, trenches. Earth up a little during the summer, keeping the leaf stalks close together, so that the soil cannot get between them. Finish earthing up in autumn, and never hoe or earth up in moist weather, nor when the plants are moistened with dew.

To preserve Celery for winter, dig trenches 1 foot in width and as deep as the tops of the plants. Stand the Celery in these, erect as they grew, with what dirt adheres to the roots, packing closely, but not crowding. After the trench is filled it should be covered with straw or leaves as a protection from frost. Do not cover until the weather becomes quite cold, and then only a little at a time, as the cold becomes greater. Celery will bear a good deal of frost. The trench must have good drainage.

DWARF GOLDEN SELF-BLANCHING.—Our strain of this variety is unexcelled and absolutely reliable; this sort is, without doubt, the finest early Celery in cultivation. It is perfectly solid, of a fine, nutty flavor; attains a good size, and when blanched is of handsome golden yellow color. Pkt. 5c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.

GIANT GOLDEN HEART.—A selection from Dwarf Golden Heart, which it resembles, but grows larger and is a better keeper; a favorite with Chicago gardeners. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

GIANT PASCAL.—The largest variety grown; is also the best keeper; of fine, nutty flavor, and very easily blanched; deservedly popular for fall and winter use. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

SCHUMACHER.—Very large, golden yellow heart, crisp and tender. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

IMPROVED WHITE PLUME.—A well-known and perhaps the most popular variety of Celery; very early, ornamental, and for quality, surpassed by none; has great merit as an early market sort. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.



Improved White Plume

SOUP CELERY.—Seed for flavoring soups, pickles, etc., 75c per lb.

PINK PLUME.—New. Practically identical with Improved White Plume, but with the added merit of the stalks being richly suffused with pink; attractive in appearance and very fine in quality. Pkt. 5c; oz. 25c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

CELERIAC (Turnip Rooted Celery)

German, Knollen Sellerie French, Celeri-rave Spanish, Apio raíz de Nabo

CULTURE.—A variety of Celery with turnip-shaped roots, which are white-fleshed, comparatively tender, and have the flavor of celery stalks. The seed may be sown in the open ground in April, and the young plants nursed in the same way as celery; but in planting out the ground is manured and dug, not trenched, and the plants are set in shallow drills 12 inches apart, watering freely. As the growth advances, draw the earth to the plants, by which the knotty roots will be blanched and made delicate and tender.

LARGE EARLY ERFURT.—We have found this to be a great improvement on some of the older sorts of Celeriac, for while of equally good flavor, it attains a larger size. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

LARGE SMOOTH PRAGUE.—An improved form of Turnip-rooted Celery; round, smooth roots, with very few side roots. This is the largest variety, and one of the very best. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

**CORN, SUGAR**

German, Wefchcorn

Spanish, Maiz

French, Mais

One quart will plant 200 hills; 1 peck will plant 1 acre in hills.

CULTURE.—Corn requires a good soil and a warm situation. Commence for first early by planting the early varieties about May 1 and if a continuous supply is wanted all

summer, make plantings about two weeks apart from May 1 until the last of July, first planting early varieties, then later ones. Plant in rows 3 feet apart, and make the hills about the same distance apart in the rows. Five kernels in the hills are plenty. Cover about 1 inch deep for early, and a little deeper for late. Thin to three plants in a hill.

Extra Early Sugar Corn

ADAM'S EXTRA-EARLY.—Not a sugar Corn, but largely grown for early use, especially in the South. Pt., 20c; qt. 30c; pk. \$2.00; bu. \$6.00; ear, 6c; doz. 60c.

GOLDEN BANTAM.—Extremely early yellow variety of delicious flavor. Pt. 30c; qt. 50c. Peck \$4.00.

IDEAL SWEET CORN.—The earliest and one of the best corns. Large ears. Delicious and tender. Pt. 25c; qt. 40c; pk. \$2.50; bu. \$9.00.



Adams' Extra Early.

Medium Early Sugar Corn

ADAM'S EARLY.—Not a sugar Corn, but grown extensively all over the country for market purposes. Pt. 20c; qt. 30c; pk. \$2.00; bu. \$6.00; ear 6c; dozen ears 60c.

BLACK MEXICAN.—One of the sweetest and best varieties grains black when ripe, but when in condition for the table cooks remarkably white. Pt. 30c; qt. 50c; pk. \$3.00.

STABLER'S EARLY.—Large, white ears of finest quality; very desirable for both canners and gardeners. Pt. 30c; qt. 50c; pk. \$3.00.

MAMMOTH EARLY.—An earlier and smaller variety of the Late Mammoth. Pt. 30c; qt. 50c; pk. \$3.00.

PREMO.—An early variety of unusual merit. The ears are large and the grain very sweet. It matures in 60 days, which makes it a most desirable sort. Pt. 30c; qt. 50c; pk. \$3.00.

Late Sugar Corn

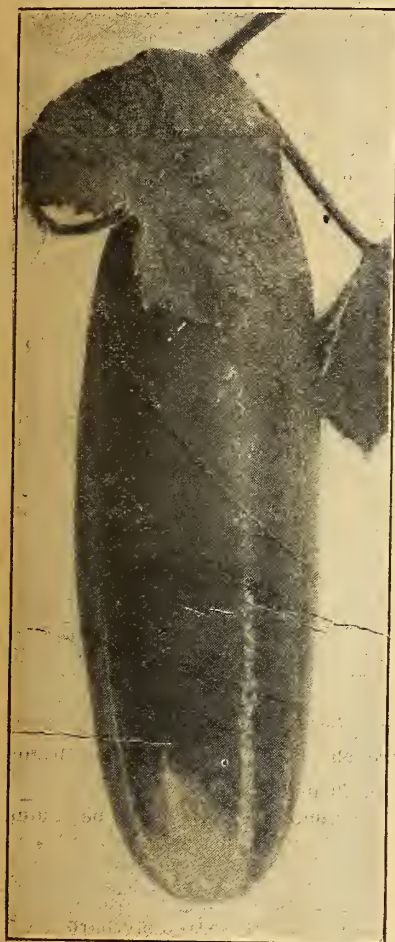
COUNTRY GENTLEMAN.—Very distinct from any other sort; sometimes yields as many as five ears on a stalk; cob very small, with deep kernels of pearly whiteness. This is considered the finest of all Sweet Corn; the quality is delicious, and will delight the most fastidious epicure. Pt. 30c; qt. 50c; pk. \$3.75.

LATE MAMMOTH.—The largest and latest variety; ears of immense size, grains large and broad; quality of the best. Pt. 30c; qt. 50c; pk. \$3.75.

STOWELL'S EVERGREEN.—The standard for quality and the best known variety; a favorite alike with canners and market men; remains a long time in condition suitable for boiling. Pt. 30c; qt. 50c; pk. \$3.50; ear 12c; dozen ears \$1.25.

WHITE EVERGREEN SUGAR CORN.—Pt. 30c; qt. 50c; pk. \$3.50.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.



CUCUMBER

German, Gurfie

Spanish, Pepino

French, Concombre

One ounce will plant 50 hills; two pounds will plant an acre.

CULTURE.—For earliest use, sow the seed in the hot-bed or green-house in February or March, in warm loam, where the temperature is about 90 degrees; cover half an inch deep, and, when the plants are of fair size, transplant into hills (made in the green-house), four plants in a hill, so that when the weather permits the whole hill can be moved to the open ground by means of tins made for that purpose. Plant for general use in the open ground, about June 1st, in hills 6 feet apart each way, and thin to 3 plants in a hill. Fine old manure (about 6 cords per acre) is sufficient; or, better still, plant on land from which a crop has been taken, and which was heavily manured for that crop. A sprinkling of dry plaster will keep off the striped bug.

IMPROVED LONG GREEN.—Fine for pickling when small; also good for table use when about half grown. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00.

JERSEY PICKLING.—Used extensively by pickle manufacturers in New Jersey and Pennsylvania. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00.

EARLY FORTUNE.—A very fine, early and productive sort. White Spine. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00.

WHITE SPINE, ARLINGTON IMPROVED.—One of the finest Cucumbers for forcing, and one of the most perfect in shape, size, color and quality; very brittle and crisp. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00.

WEST INDIAN GHERKIN.—The only genuine Gherkin. Small, oval and covered with spines; color light green; used exclusively for pickling. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

COLLARDS, or COLEWORT

German, Blattertohl

French, Chou

Spanish, Cabu

One ounce will produce 3,000 plants.

A variety of Cabbage known in different sections as "Cole" and "Colewort." It is extensively used in the South for "greens," where it continues in luxuriant growth all the winter.

TRUE GEORGIA.—Used as "greens" mainly in the South and West. As the leaves are pulled off others grow in their places. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

CORN SALAD

LARGE GREEN CABBAGE.—A small, hardy salad; used also as a substitute for lettuce; can be sown in September and wintered over the same as Spinach. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00.

WATER CRESS (True)

WATER CRESS.—Highly esteemed as a salad during the Spring and Fall. Also used as a garnish for meats during the winter. Seed may be started readily in pans or boxes of very moist earth, and the young plants transplanted to shallow water. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.50.

ENDIVE

German, Engivie

French, Chicoree

Spanish, Endivia

CULTURE.—Endive is one of the best salads for fall and winter use. Sow for an early supply about the middle of April. As it is used mostly in the fall months, the main sowings are made in June and July. Plant 1 foot apart each way. When the plant has attained its full size, gather up the leaves and tie them by their tips in a conical form. This excludes the light and air from the inner leaves, which, in the course of from three to six weeks become bleached.

WHITE CURLED.—For early use; should be used when young. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

GREEN CURLED.—Same price as White.

EGGPLANT

German, Gierpanze

French, Aubergine

Spanish, Berengena

One ounce for 1,000 plants.

CULTURE.—The Eggplant will thrive well in any good garden soil, but will repay good treatment. The seeds should be sown in hot-bed or green-house in March or April, and when about an inch high potted in 2-inch pots. Plant out about June 1st, $2\frac{1}{2}$ feet apart. If no hot-bed is at hand they can be grown in any light room where the temperature will average 75 degrees.

BLACK BEAUTY.—The earliest large variety; color rich dark purple. Pkt. 10c; oz. 75c; $\frac{1}{4}$ lb. \$2.00.

NEW YORK IMPROVED PURPLE SPINELESS.—Similar to New York Improved Purple, except that it is entirely free from spines. Pkt. 10c; oz. 75c; $\frac{1}{4}$ lb. \$2.00.



LEEK

German, Lauch French, Poireau
Spanish, Puerro

One ounce will plant 200 feet of drill.

CULTURE.—The Leek is very hardy and easily cultivated; it succeeds best in a light but well-enriched soil. Sow as early in the spring as practicable, in drills 1 inch deep and 1 foot apart. When 6 or 8 inches high transplant in rows 10 inches apart each way, as deep as possible, that the neck, being covered, may be blanched.

LARGE LONDON FLAG.—The oldest and best-known and most largely grown variety. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.00.



Large London Flag.

GOOD SEEDS
ARE THE CHEAPEST
BUY OURS

GOURD

One ounce will plant 25 hills.

CULTURE.—Gourds are tender annuals, and should not be planted until all danger of frost is over, and not less than 6 feet apart each way, in good rich loam. Three plants in a hill will be sufficient to leave at the last hoeing.

DIPPER.—This, like the Sugar Trough, has a thin but hard shell, and can readily be made to serve useful purposes. Oz. 15c; $\frac{1}{4}$ lb. 50c.

KOHL-RABI

German, Kohl-Rabi French, Chou-Rave Spanish, Col de nabo
One ounce will sow 200 feet of drill.

CULTURE.—This vegetable, the popularity of which is rapidly increasing, combines the virtues of the turnip and cabbage, but excels both in nutritive, hardy and productive qualities. The seed may be sown in June, in rows 18 inches apart, and the plants thinned out to 8 or 10 inches in the rows.

EARLY WHITE VIENNA.—Best for general table use; flesh tender and white. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.00.

LARGE GREEN, or WHITE.—Good for table use and is also used for feeding stock. Same prices as White Vienna.

MUSHROOM SPAWN

Mushrooms may be grown in cellars, under green-house benches or in sheds, wherever a temperature of 50 degrees can be kept up throughout the winter. We issue a special circular giving full cultural directions, which will be sent on request. By express—20c per brick; 10 bricks for \$1.75. A brick is enough for 9 square feet. Mailing weight, 2 lbs. per brick.

HERBS

CULTURE.—The seeds should be sown in Spring, in shallow drills, 12 inches apart, and the young plants thinned out or transplanted to about 4 inches. They should be harvested on a dry day, just before the blossom develops, dried quickly and bottled, or closely packed in dry boxes, with the air entirely excluded.

	Pkt.	Oz.
Anis. Used for flavoring.....	\$0.05	\$0.10
Balm. Very fragrant leaves.....	.05	.30
Caraway. The seeds of this herb are used for flavoring and render satisfaction when devoted to this purpose.....	.05	.10
Catnip.....	.05	.30
Coriander. Seeds used for flavoring.....	.05	.10
Dill. Used for flavoring pickles.....	.05	.10
Horehound. Very useful in curing coughs.....	.05	.20
Lavender. Leaves very fragrant.....	.05	.15
Rosemary. Leaves very fragrant.....	.05	.40
Sage. A highly aromatic herb; most useful of all.....	.05	.15
Savory, Winter.....	.05	.15
Sweet Basil. Leaves used for flavoring.....	.05	.15
Sweet Fennel. Seeds aromatic.....	.05	.10
Sweet Marjoram. Used as a seasoning.....	.05	.15
Summer Savory. Used as a culinary herb.....	.05	.10
Thyme. Used as a seasoning.....	.05	.25

KALE, or BORECOLE

German, Blatter-Kohl French, Chou Vert Spanish, Breton

One ounce will produce 3,000 plants.

CULTURE.—Sow from the middle of April to the beginning of May in prepared beds; transplant in June, and treat in the same manner as for Cabbage. Of all the Cabbage tribe, this is the most tender and delicate, and would be much more extensively grown than it is if its excellent qualities were generally known. The varieties are all extremely hardy, and are best when touched by frost.



Dwarf Green Curled Scotch.

DWARF GREEN CURLED SCOTCH, or NORFOLK.—Rarely exceeding 18 inches in height, but spreading out under good cultivation to 3 feet in diameter; leaves beautifully curled and bright green. Oz. 20c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

GERMAN CURLED.—Price, \$1.25 per lb.

IMPROVED IMPERIAL CURLED KALE.—A beautifully curled and crumpled sort, of strong, vigorous habit. The leaves are a beautiful dark-green color, and delicate in flavor. A striking feature in this Kale is that it will stand longer before going to seed than any other. In the latitude of Washington it will stand throughout the winter without protection. Crop failed.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

LETTUCE

German, Lattich

French, Laituce

Spanish, Lechuga

One ounce will sow 100 square feet, or 120 feet of drill.

CULTURE.—Requires a rich, moist soil. and to be crisp and tender needs to be grown in cool weather. For winter use, sow in hot-beds every two weeks, at the rate of one ounce of seed to four sashes (a sash is 3 feet long by 6 feet wide); cover very lightly and transplant first to 3 inches apart each way, afterward to 8 inches. For garden or field, sow in rows, and cover one-fourth of an inch deep, and thin out to 12 inches apart in the rows. For New England, the White-seeded Tennisball, for cultivation under glass, and the Black-seeded Tennisball, for outdoor use, are the standard varieties.



Boston Market.

WHITE LOAF LETTUCE.—The best of all. Has large heads, suitable for frames or outdoor. Fine for market gardeners. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c; 1 lb., \$1.00.

BIG BOSTON.—A most desirable variety, either for forcing in cold frames or open ground planting; always produces large, solid, salable heads. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

BOSTON MARKET.—One of the best for forcing under glass, as well as for outside use; forms fair-sized heads; edges of leaves slightly tinged with red. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

GRAND RAPIDS.—As a distinctly forcing and shipping Lettuce this variety undoubtedly stands at the head of the list; beautiful in appearance. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.

IMMENSITY.—New. The largest head Lettuce in the world. Tender, sweet and crisp. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

PRIZE-HEAD EARLY.—Leaves green and red, very thin, crisp and tender; one of the best for private use. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

SALAMANDER.—Fine, compact heads, which resist summer heat admirably; very popular in some sections. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

SIMPSON BLACK-SEEDED.—Nearly double the size of the Early Curled Simpson; leaves are delicate golden yellow; superior variety for forcing or sowing out-of-doors. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

MAY KING.—Heads extra large and solid; green outside, but heart clear yellow; very desirable. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

MELON, MUSK

German, Melone

French,

Spanish, Melon Muscatel

One ounce will plant about 80 hills.

CULTURE.—A rich, deep, sandy loam, well worked and highly manured with old rotten compost, is of the first importance. Plant when all danger of frost is over, in hills 5 to 6 feet apart each way; scatter a dozen seeds to a hill, and after they are out of danger from bugs, thin to three or four plants. When they have four or five leaves, pinch off the end of the main shoot, which will cause the lateral branches to put forth sooner. This will strengthen the growth of the vines, and the fruit will come earlier to maturity.

SWEET AIR CANTALOUPE

We know from what we have seen of this melon for the past three seasons that we cannot speak too highly of this melon. It is the sweetest, finest flavored, juiciest and best melon ever offered.

It is a little larger than the Rocky Ford, well netted, thick green flesh, small seed cavity. When the other standard sorts have been flat to the taste this has been perfect in sweetness.

It is prolific. The best to grow for profit; the best for table; the best for restaurant; what more can we say. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

ANNE ARUNDEL.—An improvement on Baltimore or Acme, of same shape and color, but twice as large. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

BALTIMORE, or ACME.—This is the favorite melon in Baltimore markets, and is also known and highly esteemed by market men in New York and Philadelphia. It is early, oblong in shape; flesh green and very fine. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

EMERALD GEM.—One of the very earliest varieties; fruit small, skin deep emerald green; flesh a handsome salmon-color and very thick; flavor most delicious; a splendid melon for hotels and restaurants. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.



Sweet Air Melon.

NEW "HONEY DEW."—Honey Dew produces a melon with smooth, almost white rind, measuring about 6 inches in diameter, 7 to 8 inches long. The green flesh is thick and is of a peculiar sweet flavor very hard to describe. They apparently are at their best when a trifle over-ripe. Pkt. 5c and 10c; oz. 25c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

MELON MUSK—Continued

ROCKY FORD.—An improved and oblong form of the Netted Gem. A most excellent green-fleshed sort. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

TIPTOP.—Varies from round to slightly oblong; skin, pale green, covered with a handsome netting; flesh, rich, deep salmon color and sweet and spicy in flavor. The flesh being thick, fine-grained and firm, makes this an excellent shipping melon. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.25.

PAUL ROSE.—This new melon is superior to all others as a market variety, and has few equals for the home garden. Fruit oval; flesh rich orange red. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.25.

FINE NETTED NUTMEG.—Small, very early and fine-netted; fruit round; flesh green and very sweet. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.25.

MELON, WATER

German, Waffermelone

French, Melon d'Eau

Spanish, Zandia

One ounce will plant 50 hills.

CULTURE.—Watermelons are cultivated in hills which should be 6 to 8 feet apart each way, and composed of light, moderately rich soil. The hills should be dug about 2 feet square, 18 inches deep, and half filled with well rotted manure, which must be thoroughly incorporated with the soil. Plant in May, ten seeds to a hill, and when the plants are well up, thin out to three. Cultivate until the vines cover the ground, and pinch the ends of the growing shoots to induce early fruiting.

TOM WATSON.—This melon has created quite a furore wherever grown, and we believe is unquestionably the best quality shipping melon in our list. It has a dark green rind, solid red, luscious meat, ripening close up to the rind. The rind is very tough, making it an excellent melon for shipping long distances. Its flavor and fine qualities also commend it very strongly for the private grower. We believe it is destined to become one of the most popular melons on our list. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

EDEN.—Similar in appearance to Kolb Gem and of even better quality. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

FLORIDA FAVORITE.—Highly prized for its delicious flavor; large, oblong; rind dark green, with stripes of lighter green; ten days earlier than Kolb Gem. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

KOLB GEM.—Originated in Alabama, and more largely grown in the South than any other melon; as a shipping variety has no superior; rind, dark green, mottled; shape, nearly round; quality, superb. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

MONTE CRISTO, or KLECKLEY'S SWEETS.—Fruit oval and of medium size; skin dark green; flesh rich bright red, very sweet and tender. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00.

SWEETHEART.—New. Globular in shape; skin very bright, mottled green; flesh bright red, firm, and heavy, but crisp, melting and exceedingly sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.



Sweetheart.

TRIUMPH.—New. Nearly round, large and an excellent shipper; skin dark green; flesh bright red. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

GEORGIA RATTLESNAKE.—An excellent market variety; large, oblong; rind dark, mottled and striped. Pkt., 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

ONION SEED

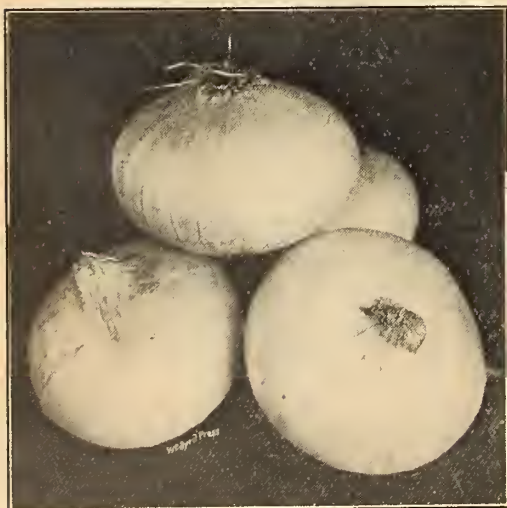
German, Zwiebel

Spanish, Cebolla

French, Oignon

One ounce will plant 100 feet of drill; 5 or 6 pounds in drills for an acre. For sets from 50 to 60 pounds should be sown to the acre, according to the richness of the soil.

CULTURE.—The Onion thrives best in a rather deep, rich, loamy soil, and unlike most vegetables, succeeds well when cultivated on the same ground for successive years. The best culture requires that the ground be deeply trenched and manured the previous autumn, and laid up in ridges during the winter to pulverize. As early in the spring as the ground is in working order, commence operations by leveling the ground with a rake and tread it firmly; sow thinly in drills about one-fourth of an inch deep, and 1 foot apart; cover with fine soil, and press down with the back of a spade or a light roller. When the young plants are strong enough, thin gradually so that they stand 3 or 4 inches apart. Keep the surface of the ground open and free from weeds by frequently hoeing, taking care not to stir the soil too deeply or to collect it about the growing bulbs.



Silver Skin Onion.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

ONION SEED—Continued

YELLOW GLOBE DANVERS.—Undoubtedly the best-known and most popular of all Onions; the earliest yellow variety; is entirely free from stiff necks. Globular in shape; has a small top. It is the most productive, producing as high as 1,000 bushels per acre, and will average on good soil with proper culture, 700 or 800 bushels. Pkt. 5c; oz. 30c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.50.

PRIZETAKER.—This variety of recent introduction, annually grows in favor. It excels every Onion now existing in beauty, size and productiveness, and equals the best in quality, being mild in flavor as the imported Spanish Onions of our groceries. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.00.

WHITE ONION SETS.—Grown from our choice strain of the Philadelphia White Silverskin seed.

LARGE RED WETHERSFIELD.—Onion growers who prefer the red varieties will find our pedigree strain far surpassing the ordinary Red Wethersfield in size, productiveness and keeping qualities. It is of the finest form, skin deep purplish red, flesh purplish white, much finer than many of the red sorts. Immense crops of this Onion are grown each season from our seed by some of the largest growers in the United States who realize the very highest prices for their crops. Pkt. 5c; oz. 30c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.50.

WHITE PORTUGAL, or SILVERSKIN.—A large, flat, white Onion of mild and pleasant flavor; hard and fine-grained, and a good keeper. Extensively sown for sets, and is also largely grown for pickling. Pkt. 5c; oz. 50c; $\frac{1}{4}$ lb. \$1.50; 1 lb. \$5.00.

ONION SETS

PRICES ON APPLICATION.

YELLOW ONION SETS.—These will produce handsome well-ripened bulbs of large size quite early in the summer.

OKRA

German, Dcher

French, Gombo

Spanish, Quimbombo

One ounce will plant 100 hills.

This is an annual from the West Indies, cultivated for its green seed-pods, which are used in soups or stewed and served like Asparagus. It is highly esteemed in the South for making gumbo soup. The pods when young and tender should be sliced in sections, strung on a thread and hung up in the shade to cure like dried apples; can be used for soup at any time.

CULTURE.—Sow the seed thinly in dry, warm soil, in shallow drills 2 feet apart. After the plants are up, thin them out to 9 inches apart; hoe frequently, and draw a little earth to the stems as they grow. Gather the pods when quite green and about $1\frac{1}{2}$ inches in length.

EARLY DWARF WHITE.—White pods. Pods extra long when fully matured, measuring a foot in length; thick and fleshy; early and prolific. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

LONG GREEN.—Pods long, green and ribbed, and a heavy bearer. Long Green same price as Dwarf White.

PARSLEY

German, Peterfilie

French, Persu

Spanish, Perejil

One ounce for 150 feet of drill.

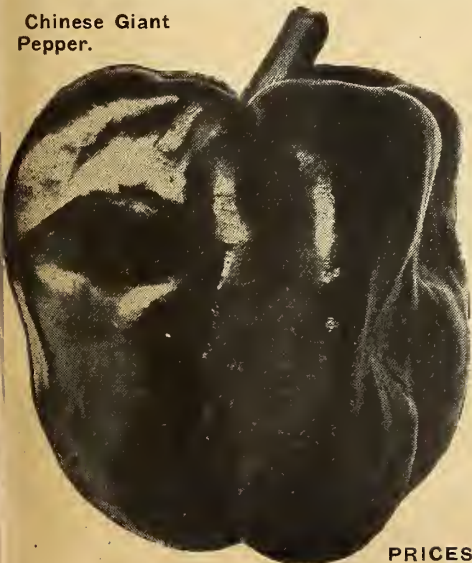
CULTURE.—Parsley succeeds best in rich, mellow soil. As the seed germinate very slowly it should be sown early in spring, previously soaking the seed for a few hours in tepid water. Sow thickly in rows a foot apart and half an inch deep. For winter use, protect in a frame or light cellar, or a few plants may be placed in pots or boxes and kept in the house.

CHAMPION MOSS CURLED.—An English strain with moss curled foliage and a very vigorous grower. A standard variety; desirable. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

EMERALD DWARF EXTRA CURLED.—Leaves finely cut and curly and bright green; good for home or market gardening. Same price as Moss Curled.

FINE DOUBLE CURLED.—A standard variety; plants bear an abundance of finely curled leaves; ornamental. Same price as Moss Curled.

Chinese Giant
Pepper.



Champion Moss Curled Parsley.

PEPPER

German, Pfeffer

French, Piment

Spanish, Pimiento

One ounce will produce 2,000 plants.

CULTURE.—Grown largely for pickles. Sow in hotbeds early in April, and transplant to the open ground when the weather is favorable. They should be planted in warm, mellow soil, in rows, 18 inches apart. They may also be sown in the open ground when danger of frost is past.

CHINESE GIANT.—New. The largest and finest mild red variety. Failure.

LARGE BELL, or BULL NOSE.—A favorite and well-known pickling sort; is early, large, mild, and thick-skinned. Failure.

LONG RED NARROW CAYENNE.—Pods slender, about 3 inches long and bright red; very pungent and productive. Pkt. 5c; oz. 30c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.00.

RUBY KING.—The best and most prolific mild red Pepper for market or family use; so sweet and mild they can be eaten raw like an apple; largest size. Failure.

SWEET MOUNTAIN, or MAMMOTH.—Large and mild-flavored; a well-known standard sort; color glossy red; rind thick and fleshy; popular with all growers for market. Failure.

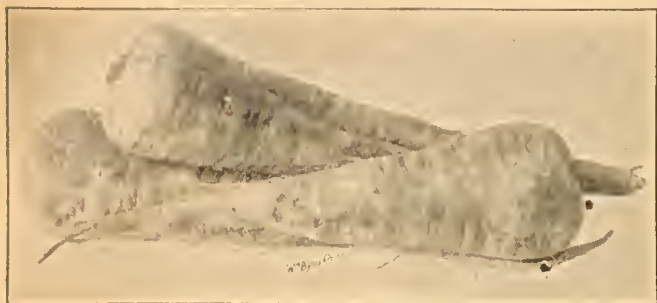
PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

PARSNIP

German, Pastinate

French, Panals

Spanish, Pastlnaca



Hollow Crown Parsnip.

One ounce to 200 feet of drill; 5 to 6 lbs. in drills to acre.

CULTURE.—Sow as early in spring as the weather will admit, in drills 15 inches apart, covering half an inch deep. When well up, thin out to 5 or 6 inches apart in the rows. Unlike carrots they are improved by frost, and it is usual to take up in fall a certain quantity for winter use, leaving the rest in the ground till spring, to be dug as required.

SUGAR, or HOLLOW CROWN.—A very reliable and favorite sort for general culture. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.25.

GUERNSEY.—Roots not quite so long as Hollow Crown but thicker and more easily gathered; smooth and fine grained. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.25.

PEAS

German, Erbfen

French, Pois

Spanish, Guizante

One quart for 75 feet of drill; 2 or 3 bushels in drills for an acre.

CULTURE.—Our trial of Peas is probably the most extensive on this side of the Atlantic, and it enables us to discard inferior sorts and to offer in the following list only the best varieties. Peas come earliest to maturity in light, rich soil.

For early crop, a deep loam or soil strongly inclining to clay is best. For early crops, decomposed leaves or leaf-mold should be used; or, if the soil is very poor, strong manure may be used. For general crops a good dressing should be applied, and for the dwarf-growing kinds the soil can hardly be too rich. When grown as a market crop, Peas are never staked; for private use, they are generally sown in double rows, and the tall varieties staked up by brush. For an early crop, sow as soon as the ground can be worked, and make repeated sowings every two weeks for succession. After the first of June sowing should be discontinued until the middle of August, when a good crop may sometimes be secured by sowing an extra early sort for fall use.

LAXTONIAN.—A grand, early, dwarf Pea; enormous pods; the largest of peas. The pods of Laxtonian are very large, and are produced on a low-growing, sturdy vine, without support of any kind. The flavor is just as rich and good as any of the later varieties, which entitles it to a permanent place in every garden. The plant is only $1\frac{1}{2}$ feet high, branching in habit. Pt. 45c; qt. 60c; pk. \$4.00; bu. \$14.00.

Extra Early Dwarf Peas

BLISS AMERICAN WONDER.—One of the earliest wrinkled sorts, and one of the most popular. Height $\frac{3}{4}$ ft. Pt. 25c; qt. 40c; pk. \$2.75; bu. \$9.00.

SUTTON'S EXCELSIOR.—New. As early as American Wonder, with much larger pods and more prolific. Height 1 ft. Pt. 25c; qt. 40c; pk. \$2.75; bu. \$9.00.



Telephone Pea.

Extra Early Peas (Not Dwarf)

DWARF TELEPHONE (Carters Daisy).—Excellent new variety; large, well-filled pods; peas of fine flavor. Height, $1\frac{1}{2}$ ft. Failure.

GENUINE ALLEN'S IMPROVED TELEPHONE.—Pod very large and of very dark green color, making it excellent for market purposes. Immense peas of first-class quality; one of the finest yet introduced. Pt. 35c; qt. 50c; pk. \$3.25; bu. \$12.00.

THOMAS LAXTON.—Similar to Gradus, but more hardy and productive. Height 3 ft. Pkt. 5c; qt. 30c; qt. 50c; pk. \$3.25; bu. \$12.00.

ALASKA.—The earliest blue Pea; a fine sort; popular with canners and market gardeners; ripens uniformly. Height, $2\frac{1}{2}$ ft. Pt. 25c; qt. 50c; pk. \$3.25; bu. \$11.00.

BLACK-EYED MARROWFAT.—(Hand-picked stock). Is very hardy and prolific. Height 5 ft. Pt. 25c; qt. 35c; pk. \$2.00; bu. \$6.00.

FIRST AND BEST.—Very early and prolific; a standard variety. Popular with canners. Height $2\frac{1}{2}$ feet.

MAMMOTH MELTING SUGAR.—Edible pods. A fine new variety, producing abundantly; large, broad pods, very brittle and entirely stringless. 4 ft. high. Pt. 25c; qt. 50c; pk. \$3.00.

GENUINE ALLENS' AMEER.—New. Extra early blue Pea; large, dark green pods; on order of Gradus. Height, 3 ft. Pt. 30c; qt. 50c; pk. \$3.25; bu. \$12.00.

LARGE WHITE MARROWFAT.—(Hand-picked stock). Cultivated very extensively for the summer crop. Height, 4 feet. Pt. 25c; qt. 35c; pk. \$2.00; bushel \$6.00.

GENUINE ALLENS' GRADUS, or PROSPERITY.—Without doubt the finest extra early Pea yet introduced; it is in condition to pick about four days after Rice's Extra Early. The pods are very large, and well filled with large, wrinkled, deep green peas of the very finest quality. Height 2 feet. Pt. 30c; qt. 50c; pk. \$3.25; bu. \$12.00.

TELEPHONE.—Pods very large; filled with immense peas of first-class quality; one of the very finest yet introduced. Height $4\frac{1}{2}$ feet. Pt. 30c; qt. 50c; pk. \$3.25; bu. \$11.00.

POTATOES—For Seed.



Early Rose Potato.

German, Kartoffeln

Spanish, Bataas

French, Pomme de Terre

In drills 3 feet apart, 12 to 14 bushels to the acre. One peck will plant about 125 hills.

CULTURE.—The Potato, like all robust-growing vegetables, can be grown with varying success on soils of all kinds and in all conditions of fertility, but the soil best suited to it is a sandy loam. In all heavy soils it is more subject to disease, and the flavor, also, is much inferior. In breaking up good pasture land, the decaying sod answers sufficiently well for the first year in lieu of manure. Manure is applied either in rows or hills, or broadcast over the ground and plowed in—the latter in most cases being preferable. If the soil is good, but little manure is required. In highly enriched soil the plants are more liable to disease than when grown in soil that is naturally good. The best fertilizers are those of a dry or absorbent nature, as plaster, lime, superphosphate of lime and bone dust. For wet soils these are particularly beneficial, as they not only promote growth but prevent disease. Plant as early in spring as the ground can be had in fair working order, in hills or ridges about 3 feet apart, covering in light, warm soils about 4 inches deep, but in cold, wet situations $2\frac{1}{2}$ or 3 inches will be sufficient.

Prices of all varieties of Potatoes on application.

Extra Early Potatoes

EARLY OHIO.—Now widely known and deservedly one of the most popular sorts. It has the advantage of being fit for use and sale even before fully ripe. A few days earlier than the Early Rose, and similar in color and habit of growth. Quality, dry and mealy.

EARLY ROSE.—Our stock of this popular variety is in its original purity, the planting stock having been renewed annually for several years past from Houlton, Maine, where it is very popular and about the only variety planted for market.

EARLY SIX WEEKS.—Undoubtedly the earliest Potato grown; similar to Early Ohio in every respect, but claimed by the originator to be earlier than this standard well-known sort. We recommend this for first-early planting.

IRISH COBBLER.—A variety which becomes popular wherever tried on account of its earliness, handsome appearance and excellent quality. Tubers are round and smooth, skin creamy white and often netted; flesh white. We do not hesitate to recommend this variety.

DOUBLE X EARLY.—One of the earliest and best Potatoes grown. No other Potato has more friends nor a better reputation than the Double X around Washington and vicinity. The tubers are oblong-oval, round at the seed end, with eyes that are almost even with the surface. An excellent keeper, very productive, of fine quality, and has proved to be a most valuable addition to our list of extra early varieties.

Medium-Early and Late Potatoes

GREEN MOUNTAIN.—The best second early potato now on the market; fine yielder; fine flavor; fine appearance. Free from blight and rot. Keeps well, and is always ready for the table.

MCCORMICK, or GERMAN PEACH BLOW.—Should be planted in July and early August. It is one of the heaviest yielders, and in good season makes a fine table sort.

SWEET POTATO ROOTS

BIG STEM SWEET POTATOES.—They are of fine size. They make only a very few roots. The quality is first-class.

JERSEY SWEET POTATOES.—Too well known to require any description. These are from reliable growers.

PUMPKIN

German, Kurbis

French, Potiron

Spanish, Calabaza

One pound will plant from 200 to 300 hills.

CULTURE.—The common practice is to drop two or three seeds in every third or fourth hill in the cornfield, but if cultivated on a large scale the seed may be sown in hills 8 feet apart each way, four plants to the hill, and otherwise treated the same as recommended for melons or cucumbers.



Sweet, or Sugar Pumpkin.

SWEET, or SUGAR.
—This is a small, round and very prolific variety; skin and flesh a deep orange-yellow; very fine-grained, sweet and fine for pies. The pie Pumpkin of New England.

Failure.

CONNECTICUT FIELD.—This variety is most extensively used throughout New England and New York for field culture; is generally planted with corn. Failure.

CUSHAW, or CROOKNECK.—Grows to a very large size, sometimes attaining a weight of 70 pounds, and resembling, in shape, the Winter Crookneck squash; of light cream-color, sometimes slightly striped with green. Failure.

KENTUCKY FIELD.—Flat and round somewhat similar to a cheese. Color of skin a deep orange; flesh is somewhat lighter; one of the best for table use. Failure.

KING OF THE MAMMOTH.—This is truly a giant among Pumpkins; specimens have been grown to weigh 250 pounds. In shape it is round, flat and slightly ribbed; color of skin and flesh bright golden yellow and of good quality, making excellent pies, but grown principally for stock; keeps well. Failure.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.



RADISH

German, Rettig, Radles
French, Radis, Rave, Petite
Rave
Spanish, Rabano

One ounce will sow 100 feet of drill.

CULTURE.—The soil for Radishes should be very rich, light and mellow, well broken by digging, as their tender and mild qualities depend much upon their rapid growth. For very early use, sow in gentle hotbeds in February, and in the open air as soon as the ground can be worked, at intervals of ten or twelve days for a succession as long as they may be wanted. The winter varieties should be sown in August, lifted before severe frost, and stored in the cellar.

LONG CINCINNATI MARKET.—An improved strain of the well-known Long Scarlet Short-Top. An excellent variety. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

CRIMSON GIANT.—Extremely large, but never pithy, suitable for forcing or open culture; very tender and crisp. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

PHILADELPHIA WHITE BOX.—One of the best varieties for growing under glass, as well as for outdoor culture; it is a rapid grower, with a short top; a beautiful round white variety; grows to a good size, and is always crisp, fine grained and tender. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

OLIVE-SHAPED, FRENCH BREAKFAST.—Pink color, olive shape, white-tipped, and the favorite variety in the markets of Paris; popular everywhere. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

VICK'S SCARLET GLOBE.—One of the very earliest Radishes in cultivation; equally good for forcing or open culture in spring and early summer; color a beautiful scarlet; crisp, juicy and tender. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

LONG ICICLE.—The finest white variety; very early. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

WHITE STRASBURG.—One of the best of the long summer sorts; roots are long, handsome and tapering, and both skin and flesh pure white; flesh firm, brittle, tender, retaining these qualities when roots have become old and large. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

Fall or Winter Radish

HALF-LONG BLACK SPANISH.—Intermediate between Long and Round Black Spanish. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

ROSE CHINA WINTER.—Bright rose-colored skin; flesh white and quality excellent; one of the best for fall and winter use; a favorite with marketmen. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

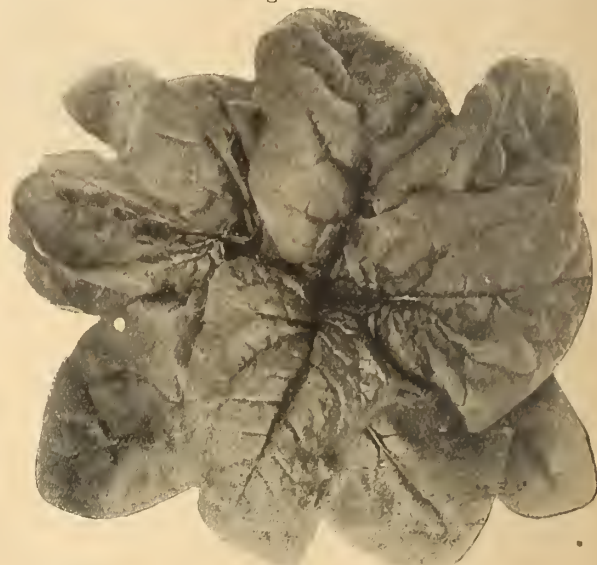
WHITE CHINESE, or NEW CELESTIAL.—It is ready for use when $2\frac{1}{2}$ or 3 inches long, and continues until nearly 6 inches long, making it almost an all-season Radish. The flesh is firm, solid, and pure white, and is very attractive in appearance. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

SPINACH

German, Spinat French, Espinard Spanish, Espinaca

One ounce for 100 feet of drill; 10 to 12 pounds in drills for an acre.

CULTURE.—This is a very important crop in our market gardens, and is one of the most easily managed of all vegetables, requiring but little culture, and may be had fit for use the entire season. The main crop is sown in September. It is sometimes covered up in exposed places with straw or salt hay during winter, which prevents it from being cut by frost; but in sheltered fields there is no necessity for covering. For summer use it may be sown at intervals of two or three weeks from April to August. Spinach is best developed and most tender and succulent when grown in rich soil.



BLOOMSDALE SAVOY-LEAVED.—Home Grown; a heavy cropper, of fine quality and very hardy; succulent leaves, curled and crinkled like a Savoy Cabbage; hardier and most productive sort. Oz. 20c; $\frac{1}{2}$ lb. \$1.25; 1 lb. \$2.00.

LONG-STANDING THICK-LEAVED.—Stands the longest before running to seed; dark green. Grown especially for us in Holland. Same prices as Savoy.

SALSIFY, or OYSTER PLANT

German, Bodsbart

French, Salsifis

One ounce will sow 50 feet of drill.

CULTURE.—Sow the seed in light, deep soil, early in spring, in drills 12 inches apart and 1 inch deep, thinning out the young plants to 4 or 5 inches. The roots will be ready for use in October, when a supply should be taken up and stored like carrots. Those remaining will suffer no injury by being left in the ground till spring, but should be dug up before commencing their growth.

MAMMOTH SANDWICH ISLAND.—We consider this the largest and most profitable Salsify in cultivation; roots are two to three times the size of the ordinary Salsify, and of more agreeable flavor. It is pure white in color, and invaluable to market gardeners. Pkt. 5c; oz. 25c; $\frac{1}{4}$ lb. 75c; 1 lb. \$2.50.

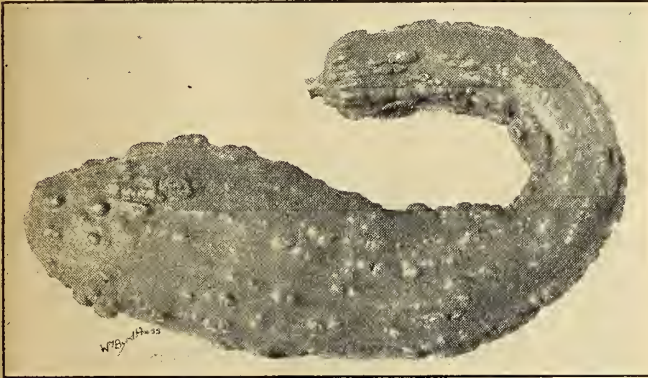


PRICES SUBJECT TO CHANGE WITHOUT NOTICE

SQUASH

German, Kurbik French, Cource Spanish, Calabaza
One ounce Early will plant 50 hills; 1 oz. Marrow, 25 hills.

CULTURE.—The plants are very tender and sensitive to cold, and planting must be delayed until settled, warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted 4 feet apart each way, and the winter sorts 8 feet. Three plants are sufficient for a hill. Care should be taken not to break the stems from the Squashes intended for winter use, as the slightest injury will increase the liability to decay.



EARLY WHITE BUSH SCALLOPED.—A standard summer variety; good either for home or market garden. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

BOSTON MARROW.—Fine fall variety; oval, bright orange; flesh yellow and firm; best for pies, and also for canning. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

BENNING'S WHITE BUSH SQUASH.—The best of the White Bush varieties. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

GIANT SUMMER CROOKNECK.—Double the size of the ordinary Crookneck and very warty, but similar in other respects. Their handsome appearance commands an extra price in the market. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

IMPROVED HUBBARD.—The well-known and standard late variety; our strain is excellent. Failure.

TURNIP

German, Rube French, Navet Spanish, Nabo

One ounce will sow 150 feet of drill; 2 pounds will sow an acre.

CULTURE.—For early use, sow as soon as the ground can be worked in spring, in drills 15 inches apart, and thin to 8 inches apart as soon as the plants are large enough to handle. For succession, sow at intervals of a fortnight until the last week of July, from which time until the end of August sowings may be made for main and late crops. The sowings should be made just before rain if possible, a rapid growth being important.

AMBER GLOBE.—Excellent for table use or feeding stock; flesh, yellow, firm and sweet. Pkt. 5c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.

EXTRA EARLY PURPLE-TOP MILAN.—The earliest Turnip in cultivation, and a splendid variety; bulb, white, flat, of medium size, with a bright purple top; one of the sweetest and finest-flavored of summer sorts. Pkt. 5c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.

RED, or PURPLE-TOP STRAP-LEAVED.—The most widely cultivated and best known variety. Used largely for sowing broadcast among corn and potatoes. It is round and flat, white on the bottom and a reddish purple above ground, and a very quick grower. Though used for stock-feeding, it is esteemed as a fine table variety. Pkt. 5c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.

TOMATO

One ounce will produce 1,500 plants.

CULTURE.—The Tomato is raised from seed, which should be sown in the hotbed about February 20th, and continuous sowing made until April 1st, according as the plants are wanted for use. When the plants are about 2 inches high, transplant to 4 inches apart; and, after three or four weeks, transplant from the hotbed into a coldframe, setting the plants 8 inches apart each way. (A coldframe is simply a low wooden frame covered with glass, used to protect such plants as are not sufficiently hardy to withstand our winters.) Keep the plants cool, so as to make them stocky. Set out in the open ground about June 1st, in well-enriched soil setting the plants 5 feet apart each way.

BONNY BEST EARLY TOMATO

—It has been selected for earliness, solidity, smoothness and evenness of ripening up to stem Fifteen days earlier than the



Bonny Best Tomato.

Beauty Tomato, and as early as the Earliana. Vigorous grower; bright red color, enormously productive. Pkt., 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.00.

ACME, EARLY.—Well known and generally cultivated; early, smooth; ripens evenly; color purplish red. Pkt., 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.00.

BEAUTY (Livingston's).—Large, smooth, pinkish red; thick flesh, regular form. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.50.

SPARKS' EARLIANA.—New. Claimed to be the earliest; large, smooth, red; very prolific. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.00.

JUNE PINK.—New. Very early; of medium size, round, smooth and very solid. Color, pink. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.00.

LIVINGSTON'S GLOBE.—New. Fruit large, always firm and smooth; color rose, tinged with purple. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.00.

MATCHLESS.—Very large, smooth, solid, and fine-flavored; cardinal red. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.00.

NEW STONE.—A great favorite with canners; the heaviest and most solid-fruited of the large Tomatoes of good quality. Our stock is distinctly superior to most of that offered under this name, being more uniform, better colored and larger. Fruit round, apple-shaped, very large, deep red, and astonishingly heavy. Pkt. 5c; oz. 25c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.50.

PEAR-SHAPED RED.—Used for preserves and to make "tomato figs." Fruit bright red; distinctly pear-shaped, and with a peculiar flavor. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.50.

PEAR-SHAPED YELLOW.—Similar to Red Pear-Shaped, except in color. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.50.

PONDEROSA.—Very large, solid and of good flavor; specimens have been grown to weigh 4 pounds; color, bright red; very few seeds. Pkt. 5c; oz. 45c; $\frac{1}{4}$ lb. \$1.50; 1 lb. \$5.00.

TRUCKER'S FAVORITE.—The finest large purple-fruited sort. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$3.75.

CHALK'S JEWEL.—New. Very early, productive; smooth, round, of superior quality. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.00.

"JOHN BAER" TOMATO.—Earliest Tomato on earth. We believe we are offering to our trade the best, the earliest, and finest tomato ever offered to the public. Fruit large and solid; bright red in color, and shaped somewhat like the Globe Tomato and about its size. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50; 1 lb. \$4.50.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

TURNIPS—Continued

RED or PURPLE-TOP WHITE GLOBE.—Quite similar to Purple-Top Strap-Leaf, excepting in shape, being almost a perfect globe, and grows to a large size; Immense cropper. Pkt. 5c; $\frac{1}{4}$ lb. 60c; 1 lb. \$2.00.

RICE'S IMPROVED GOLDEN BALL.—One of the sweetest and most desirable yellow-fleshed varieties; of medium size, a perfect globe shape, with firm, hard, yet rich and sweet flesh; it has no equal as a table variety, and keeps well. Pkt. 5c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.



YELLOW ABERDEEN (Purple Top).—A very handsome Turnip. Bulbs round and flat, deep reddish purple on top and pale yellow on the bottom; flesh pale yellow, very tender and fine flavored. Pkt. 5c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.

YELLOW AMBER GLOBE.—A splendid sort for general crop; grows large; a good keeper, with bright yellow flesh. Pkt. 5c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.

COW-HORN.—Large cropper. This variety is pure white, excepting a dash of green at the crown, and in shape is long like the Carrot. Excellent for stock. Pkt. 5c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50.

Swedish, or Russian Turnip (Rutabaga)

One ounce will sow 150 ft. of drill; 2 lbs. will sow an acre.

CULTURE.—Should be sown from the 20th of June to the middle of July, in drills 2 feet apart, and thinned out at the first working to 10 inches between the plants. Flesh close-grained, hard; will endure considerable cold. The roots are best preserved in a pit or cellar during winter, and are excellent for the table early in spring. Pkt. 5c; $\frac{1}{4}$ lb. 60c; 1 lb. \$2.00.

SWEET PEAS

The Beautiful and Popular Flower of the Day.

CULTURE.—As early as the ground can be worked in the spring make a trench 6 inches deep in rich soil, sow the seed in the bottom, covering not more than 2 inches deep; as the plants grow, fill in the earth around them and see that some suitable support is provided for them to run upon. Flowers must be picked before pods form, otherwise vines will not long continue to blossom.

ECKFORD CHOICE MIXED.—Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

NASTURTIUMS

CHOICE MIXED TALL.—Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

CHOICE MIXED DWARF.—Same price as Tall. Failure.

CLOVER AND GRASS SEED

Sold at Market Prices.

In offering field seeds to the trade, we fully appreciate the importance of pure, clean seed, and have endeavored to secure only such seed that is of the highest standard. We offer you high-grade, re-cleaned seed at the lowest prices for seed of equal quality.

MEDIUM CLOVER SEED.—A very valuable crop for pasture and hay, a great soil enricher when turned under.

ALFALFA.—A very profitable crop for every farmer. Can be cut three or four times a year. Yields a heavy crop.

SAPLING, or MAMMOTH CLOVER.—Grows much larger than the common clover and will generally last much longer.



Crimson Clover.

WHITE DUTCH CLOVER.—It forms a very close herbage and remains green throughout the season, making it one of the best varieties for lawns. It is also an excellent food for bees.

CRIMSON CLOVER.—An annual clover which produces a very early and abundant hay crop. Is also a great land improver, as the roots are great nitrogen absorbers.

ORCHARD GRASS.—A most excellent grass for pasture and hay. It withstands dry weather better than almost any other grass. Can often be cut twice in a season.

ALSIKE.—A white clover which grows very tall. It is a very valuable crop, especially for dairy farms.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CLOVER AND GRASS SEED—Cont.

KENTUCKY BLUE GRASS SEED.—Adaptable to most any sort of soil. Furnishes an abundance of rich, sweet food for all kinds of stock. Will last for years when a good sod is once formed.

RED TOP, or HERD GRASS SEED.—Very hardy and well adapted to low, damp lands, but will grow anywhere. Is fine for pasturage.

TIMOTHY.—There is no grass more valuable for hay, especially in the North. Especially adapted to moist, loamy soils. Is too well known to require a description.

MILLET, GERMAN.—Produces abundantly and makes an excellent feed for stock.

SPECIAL LAWN GRASS MIXTURES.—Our experience with this mixture impels us to say that we have never seen a better one. Has given general satisfaction to our many customers. If you want a beautiful, permanent lawn, use our mixture and you will not be disappointed.

SEED WHEAT

GOLDEN AMBER.—We specially recommend this Wheat for heavy yield; straw very stiff, standing up when almost all other kind break down.

LEAP'S PROLIFIC BEARDLESS.—This is a well known, standard variety, yielding heavily.

MIRACLE WHEAT, BEARDED.—Sow only about ½ bushel to 3 pecks to acre. Yields very heavily.

Prices upon application.

SPECIALLY SELECTED SEED CORN

OF THE FINEST QUALITY.

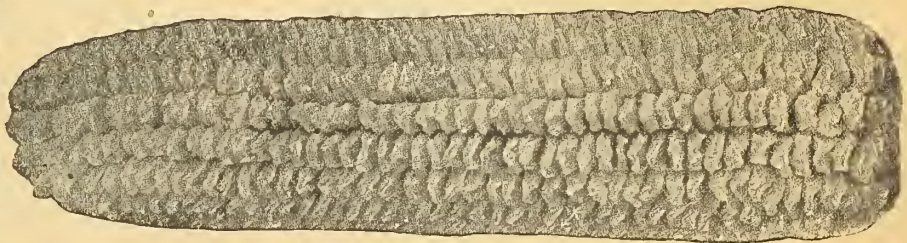
For Field Culture

BOONE COUNTY PRIZE WINNING STOCK.—We have secured from an expert corn grower of the State of Maryland a special selected stock of this corn, specially grown for seed purposes for securing the best development of ear and the largest yielding of corn.

IMPROVED GOLDEN DENT.—This is now the standard variety in many of the corn-growing sections of the Middle West. Ears average nine to ten inches long, tapering slightly toward tip, are about six inches in circumference, contain 16 to 20 rows, and are remarkably uniform. Kernels light yellow, deeply dented, and well placed on a cob of medium size. Usually matures in 110 to 115 days.

IMPROVED LEAMING.—A very popular and productive variety. On good land the stalks grow tall, producing two good ears to each stalk. The ears are long, with small red cob well filled with grains of medium size, of a rich golden color. It ripens in from 100 to 110 days, and makes a good crop even in dry seasons.

HICKORY KING CORN.—This has the largest grains with the smallest cob of any white corn. So large are the grains and so small the cob that on an ear broken in half a single grain will almost completely cover the cob section. Of strong growth, the stalks take a firm hold in the ground and stand



upright. It yields splendid crops on light soil, and is undoubtedly the most productive white field corn for the South.

BURPEE'S GOLDEN BEAUTY.—It is the largest grained and handsomest yellow corn we have ever seen. The ears have brightest golden-yellow grains, of remarkable size and completely filled out to the extreme end of the cob. The cobs are unusually small.

COCK'S PROLIFIC.—White, flinty; unexcelled for meal or hominy. Exceedingly productive, bearing four and five ears to a stalk, making it one of the best ensilage corns on the market.

EUREKA ENSILAGE CORN.—We consider this one of the best for ensilage purposes. Our seed is specially grown and may be depended upon.

Prices on application.

FODDER AND SOILING PLANTS**CHOICE WESTERN WHITE SEED OATS.**

Selected seed of choicest qualities, for winter and spring sowing.

Prices upon application.

COW PEAS (THE GREAT SOIL IMPROVER)

Make Poor Land Rich, Good Land Productive, and Enrich the Soil.

Green crops plowed under are one of the best and cheapest ways of improving the soil. For this purpose the cow pea is most popular, especially for medium or light soil. They should be sown in May or June, at the rate of 1½ bushels to the acre, and plowed under as soon as they have attained their full growth. There is no surer or cheaper means of improving poor soil than by sowing cow peas.

COW PEAS FOR HAY

If planted early, say by middle of May, in the central corn belt section, a crop can be cut and cured for hay the same as clover, then the stubble, in a short time, will put out a new growth to be turned under in the fall as a fertilizer.

The best varieties of Cow Peas for all purposes are the following:

Southern Black Eye Cow Pea.

Southern Black, or Ram's Horn.

Whip-Poor-Will, Clay and New Era.

CANADA FIELD PEAS AND OATS FOR FODDER

These make a fodder, and hay which double the production of milk.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FODDER AND SOILING PLANTS—Continued

SOJA OR JAPANESE SOY BEAN

The demand for the Soja Beans has grown remarkably of late years. Their great value is as a forage crop, for fertilizing the soil and for pasturing or feeding the green fodder much in the same way as the cow pea.

SAND OR WINTER VETCH

For forage and fertilizing purposes; it succeeds and produces good crops on poor, sandy soils as well as on good lands, growing to a height of 4 to 5 feet. It is perfectly hardy throughout the United States, remaining green all winter.

EARLY AMBER SUGAR CANE

The high value of Northern grown sugar cane for fodder and ensilage is becoming rapidly known. When fed down young as a pasture it grows rapidly again. The seed and fodder is valuable as food for horses and cattle.

DWARF ESSEX RAPE

Makes Splendid Fall, Winter and Spring Pasturage—Fine for Cattle, Sheep and Hogs.

Rape for fall sowing should be put in in July, August or September. Makes a large yielding, nutritious, succulent green feed or pasturage all through the fall, winter and early spring. The fattening properties of Rape are said to be very much better than those of clover, and it makes a first-class

crop, either for sowing alone, or for grazing during the fall and winter; can be sown with Crimson Clover. Rape can be successfully sown both in the fall and spring. Early fall seeding, however, gives the best results. Rape is best sown in drills at the rate of 3 to 5 pounds per acre; or it can be sown broadcast, when from 6 to 8 pounds per acre should be used.

WEBER'S IMPROVED EVERGREEN

The Best Broom Corn In Cultivation

MAMMOTH RUSSIAN SUNFLOWER

TEOSINTE (Reana Luxurians)

This gigantic Grammea will furnish a continuous daily supply of most nutritious green food for horses and all kinds of cattle all through the Summer. It also makes splendid dry fodder, yielding enormously, and being more nutritious and better relished by all stock than corn fodder. It stools out enormously after being cut.

Prices on application.

The cost of the very best seed is so small, compared with the value of the growing crops, that sensible planters realize that they cannot afford to risk seed of doubtful pedigree, and we know just as well that we cannot afford to risk our hard-earned reputation by selling seed of doubtful character.

INOCULATE YOUR ALFALFA, CLOVERS, COW PEAS, SOY BEANS, VETCHES AND ALL OTHER LEGUME CROPS WITH

Mulford Cultures

FOR LEGUMES

MULFORD CULTURES contain pure, tested strains of active, vigorous nitrogen-fixing bacteria for inoculating seeds of legumes or soil.

MULFORD CULTURES are "different" and should not be confused with other brands.

The color is different (they are dark, almost black, due to a special ingredient added to increase the growth and activity of the bacteria).

The count is different (bacterial counts show fully twice as many bacteria as in the old-form cultures).

The bottle is different (being sealed—an important feature which prevents all possibility of contamination from the outside air).

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of wheat, cotton, corn and other non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

MULFORD CULTURES ARE PREPARED FOR

Alfalfa	Red Clover	Soy Beans	Sweet Peas	Lespedeza
(Lucerne)	Alsike Clover	Peanuts	Garden Peas	Beggar Weed
Crimson Clover	Burr Clover	Vetch	Garden Beans	And Others
Sweet Clover	Cow Peas	Velvet Beans	Lima Beans	

Be sure to specify the particular legume on which you desire to use the MULFORD CULTURES, otherwise we will not know how to fill your order.

PRICES: 5-Acre Size, \$5.00 ("A Dollar per Acre"); 1-Acre Size, \$1.50; Garden Size, ¼ Acre, 50c. These prices include delivery on freight shipments.

FREE DESCRIPTIVE LITERATURE SENT UPON REQUEST.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Small Cost Large Returns
Easy to Use No Labor Expense



Uninoculated ALFALFA Inoculated
Photographed on same scale. Plant
on left not inoculated—Plant on right
inoculated with **Mulford Culture for
Alfalfa**. All other conditions identi-
cal.

THE CONTRAST SPEAKS FOR
ITSELF.

The Auto-Spray Pump

A SELF-OPERATING or AUTOMATIC SPRAYER

Length of cylinder, 21 inches; weight, loaded, 39 pounds; diameter of cylinder, 7 inches; capacity, about 4 gallons; weight, empty, 7 pounds; extension pipes extra.

Auto-Spray No. 1A—Brass Reservoir, Stop Cock. Price.....\$8.50

Auto-Spray No. 1B—Brass Reservoir, Auto-Pop and Auto-Pop Nozzle.

Price 9.25

Auto-Pop Nozzle Extra. Price..... 2.00

Tin Can Sprayer

One-half tablespoonful of Paris Green and one filling with water is sufficient to destroy all the bugs on 1,300 hills of potatoes.

Price.....50c

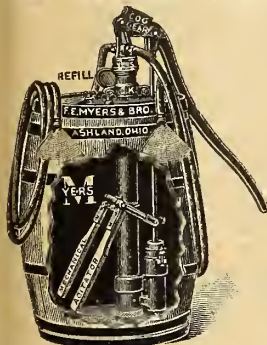
Myers O. K. Cog Gear Spray Pump

For Hot, Cold or Any Kind of Mixture. Has mechanical Agitator, solid brass Ram Plunger, ground bevel Valve and Seat. Malleable iron handle.

PRICE LIST.

No. R308C, with adjustable malleable base, with two leads of 15 ft. 7-ply, $\frac{1}{2}$ in. hose and two Fembro nozzles. Price, each.....\$35.00

These Pumps are constructed with Cog Gear Handle, which increases the leverage 25 per cent. over the plain handle. Air chamber is $2\frac{1}{2}$ inches. This in connection with the cog gear enables the operator to carry a pressure of 200 lbs. and to supply two leads of hose satisfactorily.



No. R318B, as above with one lead of 15 ft. of $\frac{1}{2}$ -in. 5-ply discharge hose, graduating Vermorel nozzle.

Price, each.....\$25.00

Myers Bucket Spray Pumps are constructed entirely of brass. They are provided with a large air chamber, brass ball valves, and detachable hose. Have patent jet agitator to keep spraying solution thoroughly mixed and agitated, and are fitted with malleable foot rest. Especially adapted for small orchards shrubbery, whitewashing, etc.

Price.....\$5.00

The Standard Spray Pump

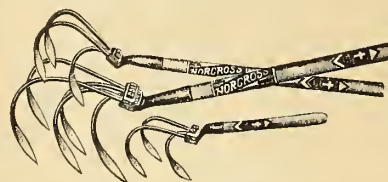
Spraying with the Standard Spray Pump means doing the work from the ground without ladders, platforms or extension rods; means a clear saving of more than half the time; means that one man does all the work, does it easily and effectively.

Ask for special Catalogue.

Price.....\$4.50



"Norcross" Cultivator-Hoes & Weeders



are among the most Modern Tools for Garden and Flowers. Like a Human Hand, they will work closer to plants without injuring them than any other Implement known, leaving the soil level, loose and untrampled.

Cost but a trifle more than the common hoe. All prongs detachable. Extra high-grade Handles. Finely finished throughout.

5-prong (weight 3 lbs.)\$1.00

3-prong (weight 2 lbs.)75

Midget (weight 12 ozs.)50

Midget Weeder can be sent by Parcel Post for 10c extra.

Detroit Tree Pruners

6 feet long	\$2.75
8 feet long	2.75
10 feet long	3.00
12 feet long	3.00



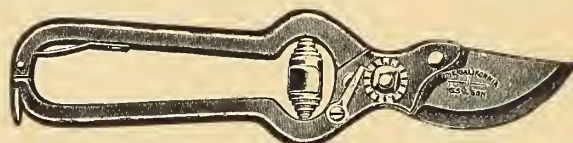
Jointed Pruner

Hand Pruning Shears

"California Pattern"

For grape vines, rose bushes, etc. Malleable handle; steel blades; nickel-plated flat spring.

Price.....\$1.25



California pattern Gun Metal Shear. Same as above.

Price.....\$1.00

Malleable handle; steel blade, with coil spring.

Price......50

Scythes



English, 36 and 38 inches.....\$1.75

American, 36 inches..... 1.50

Weed 1.50

Bush 1.50

Snaths

Grass, patent 1.00

Bush, double ring..... 1.25

Insecticides

Niagara Soluble Sulphur Compound

DIRECTIONS FOR MIXING: Fill the spray tank one-half or more full of water and pour the powdered material slowly into the tank making sure that the agitator is in motion during this time. Soluble Sulphur Compound dissolves readily in cold water. When using Arsenate of Lead (dry or paste) add to the tank after the Soluble Sulphur Compound.

DIRECTIONS FOR USE: Dormant Sprays—For early spring or late fall spraying for the control of such troubles as San Jose Scale, Oyster Shell Bark Louse, Peach Lecanium Scale, Peach Leaf Curl, Aphis and Pear Psylla Eggs, etc., use 12½ pounds of Soluble Sulphur Compound to 50 gallons of water. This strength should never be used after the buds open. Summer Sprays—For summer spraying when the trees are in foliage, for fungus diseases such as Apple Scab, Bitter Rot, Mildews, etc., one pound to 50 gallons of water. Arsenate of Lead may be used with this strength of material.

AMOUNT OF MATERIAL NECESSARY TO USE.

Experience has shown that for thorough work and best results the following approximate amounts of diluted material should be applied:

Apple and Peach Trees—1 to 5 years old, 1 gal.; 5 to 10 years, 1½ gals.; 10 to 15 years, 2 gals.

Price, per lb.25c
Price, per 5 lbs.\$1.00

Lion Brand Lime-Sulphur Solution

KNOWN AS CALIFORNIA WASH

For San Jose Scale and All Other Scale on Trees, Shrubs, Etc.

Lion Brand stands for full, concentrated strength, absolute purity, and undisputed superiority over all other lime-sulphur solutions.

Price, per qt.\$.40
Price, per gal. 1.00
Price, per 5-gal. cans. 4.25

Lion Brand is the most perfect, uniform, safe and effective preparation and combination of lime and sulphur that can be made for destroying scale. It is so concentrated that one 50-gallon barrel will make 600 gallons for strongest use, or 1,200 gallons for summer spraying, by adding water only.

No damage will be done to the tree when dormant if this mixture does go on full strength. It is a clear, cherry-colored solution, free from sediment.

Ask for special Catalogue.

Dry Arsenate of Lead

By far the best and cheapest Arsenate of lead to use.

Mix thoroughly with a small quantity of water to a cream consistency, then add the required amount of water according to recommendation.

1-lb. package\$.50
5-lb. package 2.00

Due to the unsettled condition of the market, prices named are effective at time of going to press—January 1, 1917. Orders will be filled at prevailing prices at time order is received. Write for firm prices.

Pyrox

(Reg. U. S. Pat. Office)

ONE BEST SPRAY FOR POTATOES, TOMATOES, EGGPLANT, CUCUMBERS, ETC.

If you spray your crops with Bowker's Pyrox you will add to your profits. Pyrox not only kills the destructive leaf-eating bugs and worms and protects the vines from blights, rust and fungous, but it has a healthful, stimulating action on the leaves, which are the lungs of the plant. Even if no insects or fungus are to be feared, it pays to spray your crops with Pyrox, for its stimulating effect alone.

Pyrox sticks to the foliage through heavy rain, which gives you a great advantage. Most sprays wash off with every shower. The Bowker Company has been manufacturing Pyrox for fifteen years. Its use is no longer experimental.



PRICES:

1 lb. (not mailable)....\$0.35	50 lb., 1 keg.....\$10.75
5 lb., 1 stone crock..... 1.40	100 lb., 1 keg..... 20.00
10 lb., 1 stone crock..... 2.50	300 lb., 1 keg..... 55.00
25 lb., 1 container..... 5.75	

Lime-Sulphur Formula

Lime, 20 lbs.; Sulphur, 15 lbs.; Water to make 50 gals.

Boil one to two hours with a small quantity of water, then dilute to 50 gallons with boiling water. Do not let mixture become cold; spray while yet warm. For winter or early spring use.



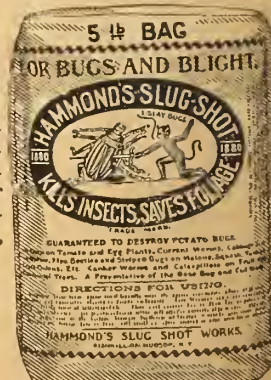
Paris Green

¼ lb. package	15c
½ lb. package.....	25c
1 lb. package	50c
2 lb. package	\$1.00
5 lb. package	2.25

Hammond's Slug Shot

Non-poisonous powder. It requires no further mixing or preparation; easily applied and not injurious or dangerous to animal or person applying it. Destroys potato bugs, slugs, worms, caterpillars, etc.

5 lb. package.....\$.40



PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Zenoleum

Lice-Killer, Disinfectant, Animal-Dip

One Gallon of Zenoleum makes 100 Gallons on Positive Disinfectant and Germicide.

Won't poison—Won't hurt you. Won't explode or burn. Kills vermin, cures skin trouble.

Invaluable as a remedy for diseases of Poultry and all Live Stock.

Kills lice and Cures Mange.

Disinfects Incubators.

Look for the Red and Green Label.

Price list Zenoleum Disinfectant and Dip:

Eight Ounces makes 6 gal. of fluid.....	\$.30
One Quart makes 25 gal. of fluid.....	.60
Half Gallon makes 50 gal. of fluid.....	1.00
One Gallon makes 100 gal. of fluid.....	1.65
Two Gallon makes 200 gal. of fluid.....	3.25
Three Gallon makes 300 gal. of fluid.....	4.75
Five Gallon makes 500 gal. of fluid.....	7.00

THE ZENOLEUM GUARANTEE

If Zenoleum is not all we say it is—or even what you think it ought to be, you can have your money back. No argument—No letters—Just money.

Pratts

Poultry Regulator and Remedies. Sold Always With a Positive Money Back Guarantee

Avenarius Carbolineum

The great wood preservative and disinfectant. Applied once a year, keeps your poultry house free from vermin.

CHICKEN FOODS

"Rarva" Meat Meal

Very necessary in poultry yards where best results are desired. Contains 85 per cent protein.

100 lb. bags	\$7.00
Less quantity, per lb. ....	.10

"Royal" Meat Meal

A good product, containing 65 per cent protein.

100 lb. bags	\$5.00
Less quantity, per lb. ....	.06

Crushed Bone

Made from fresh, clean bone, with no chemicals applied during process of manufacture. Should be fed daily. Excellent for producing eggs and keeping fowls strong and healthy.

100 lb. bags	\$3.50
Less quantity, per lb. ....	.5c

Alfalfa Meal

A green food the year round. Very high in protein, and furnishes a growing food which has, also, a medicinal value. Increases egg yield.

100 lb. bags	\$3.00
Less quantity, per lb. ....	.05



**STANDARD
CYPHERS INCUBATOR**
Fire Proofed-Insurable.

Genuine Standard Cyphers Incubators

(Look for Trade Mark—Demand the Label)

Practical poultry raisers who mean business and desire the greatest possible success should look for and demand the qualities that have made Cyphers Incubators world famous.

Fire-proofed, insurable, self-ventilating, self-regulating, non-moisture, efficient, durable and positively guaranteed.

No. 0 holds 70 hen eggs.....	\$18.00
No. 1 holds 144 hen eggs.....	28.50
No. 2 holds 244 hen eggs.....	41.00
No. 3 holds 390 hen eggs.....	49.00

Oyster Shells

A very important adjunct to the poultry yard and should be supplied liberally at all seasons of the year. Will help increase the egg yield.

Regular—100 lb. bag .....	.75c
Fine—100 lb bag .....	.75c

Mica Crystal Grit

Chickens should be liberally supplied with this grit, as few farms furnish sufficient gravel for poultry to properly digest food. Three sizes—Nos. 1, 2 and 3.

100 lb. bags85c
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Ravena Chick Food

In compounding Ravena Chick Food, the protein or flesh-and-muscle-forming element is maintained high, the heat-producing and the fat-forming elements are reduced to their proper proportion, and the ash or mineral elements are in sufficient amount to supply the needs of the rapidly growing bird. Our Chick Food contains no weed seeds.

Ravena Scratching Food

In compounding the Ravena Scratching Food, it is our aim to produce a properly balanced ration that will aid the mash food in producing healthy birds and a large supply of properly-sized, well-fertilized eggs.

Prices upon application.

Blatchford's Laying Mash

A Balanced Ration of Ground Grains, Blood Meal and Alfalfa, Ready-Mixed for Hopper and Wet Mash Feeding.

Gives Maximum Egg-Yield.

Our Laying Mash is a mixture of sound, sweet, nutritious grains in ground form, to which is added liberal portions of blood meal and meal alfalfa, thus supplying in proper proportions both animal and vegetable protein. It is not in any sense a condiment or an egg stimulant. On the contrary, it is strictly a food—a palatable, highly-nutritious, balanced egg-ration, ready-mixed for the daily mash and for hopper feeding.

This Laying Mash is of superior merit, and means more eggs and better chickens. The same care that goes to make Blatchford's Calf Meal the best is exercised in making this the best Mash.

Ask for prices.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

So-Bos-So

So-Bos-So (Kilfly) is a liquid mixture designed to protect cows and horses from torture of flies.

The preparation is positively harmless. It is used with splendid results as a disinfectant and germicide. If your animals are troubled with lice, use So-Bos-So (Kilfly). Spray your poultry with So-Bos-So (Kilfly). It kills lice or any vermin that may infect the fowls. Put up in 1-gal. cans.



Price, per gal.\$1.00

THE ELECTRIC SPRAYER

shown in above cut may be used for spraying other disinfectants and insecticides as well as So-Bos-So.

Price 50c

Medicated Salt Bricks

Dr. Blackman's Medicated Salt Bricks is the "common-sense" way of administering a stock medicine which will give good results. It is a guaranteed worm medicine and stock tonic, and is fine for the kidneys and blood and for coughs and colds. Stock dose themselves and at the same time get sufficient salt which is very important if you wish to get best results from your stock. Try it. Sold on a guarantee.

Price per brick, 25¢; per doz., \$2.50.

"Getting the Last Drop" Blatchford's Calf Meal

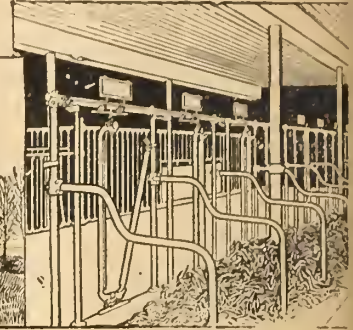
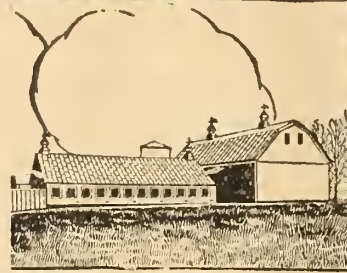
As good as New Milk at half the Cost



100 pounds makes 100 gallons of Perfect Milk Substitute.

James Dairy Barn Equipment

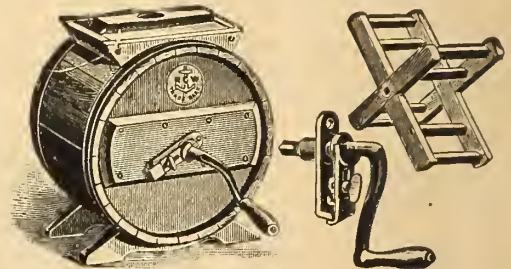
IF YOU EXPECT TO BUILD, REMODEL OR EQUIP A COW BARN ASK FOR CATALOG, "THE JAMES WAY."



Prices: 10 lb. pkg., each \$1.00; 20 lb. pkg., \$1.50; 40 lb. pkg., \$2.50; 100 lb. keg, \$5.50; 200 lb. bbl., \$10.00; 300 lb. bbl., \$14.00; 500 lb. bbl. \$22.00.

RICHMOND CYLINDER CHURN

Made of White Cedar, free from knots. A most excellent churn for farm use. Guaranteed to give satisfaction.



No. 1, will churn 3 gallons.....	\$3.50
No. 2, will churn 4 gallons.....	4.00
No. 3, will churn 7 gallons.....	4.50
No. 4, will churn 10 gallons.....	5.00



GOSHEN CHURN

A good barrel churn, easy to operate, easy to clean.

No. 0, 3 gal. size.....	\$5.50
No. 1, 5 gal. size.....	6.00
No. 2, 7 gal. size.....	6.50
No. 3, 10 gal. size.....	7.50

Glass Thermometers

8 inch... .25c 10 inch... .50c

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

GARDEN TOOLS

No. 31 Planet Jr. Combined Seeder and Wheel Hoe

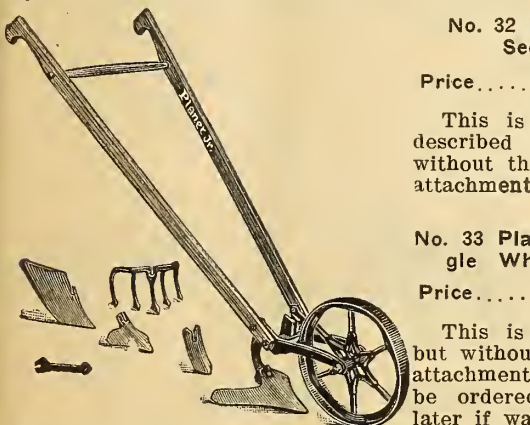
Price.....\$11.00

This new tool designed especially for private gardeners is thoroughly well-made and offered at a price to make it pay the smallest gardener. It holds one quart of seeds but will sow even a small packet of garden seed at the proper thickness and depth.

Is quickly changed to a single wheel hoe and has first class quality attachments that will

make the care of the garden a real pleasure. The seeder attachment will save

you seeds and time, and the wheel hoe part will save time and much hard work, and you will get much better results. It can be used satisfactorily by man, woman or the growing boy.



No. 32 Planet Jr. Seeder.

Price.....\$8.75

This is the No. 31 described above but without the wheel hoe attachment.

No. 33 Planet Jr. Single Wheel Hoe.

Price.....\$5.50

This is the No. 31 but without the seeder attachment which can be ordered separately later if wanted.

No. 28 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, Rake and Plow

Price.....\$22.50

Packed weight, 71 lbs. Holds 3 quarts.

Equipment: One pair 6-inch hoes, One pair 4½-inch hoes, Three cultivator teeth, One landside plow (all oil tempered), One pair 5-tooth rakes, One leaf guard, One marking attachment, Steel handles.

This is our latest and best Combined Hill and Drill Seeder and Single Wheel Hoe. It shows in its construction the results of the last four years' close study of this class of tools and is the culmination of forty years' experience.

We Recommend It, therefore, as our very best seeder. It is light running; is supplied with a narrow opening plow which plants the seed in a narrow, straight line, leaving a minimum amount of hand weeding; for the weeds are usually enough to one side or the other of the straight, narrow row of plants as to be cut out easily with a wheel hoe.

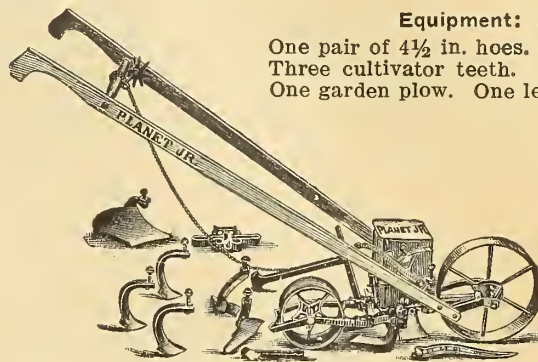
As a Seeder it drops all garden seeds in hills, 4, 6, 8, 12 or 24 inches apart, or sows them in drills with accuracy, opening the furrow, covering, rolling down and marking the next row all at one passage. The seeds drop in sight of the operator, the rear of the spout being open and white.

No. 4 Planet Jr. Combined Hill and Drill Seeder Wheel Hoe Cultivator and Plow

Steel Driving Wheel. Weight, packed, 47 lbs. Holds 2½ qts.

Equipment:

One pair of 4½ in. hoes.
Three cultivator teeth.
One garden plow. One leaf guard.



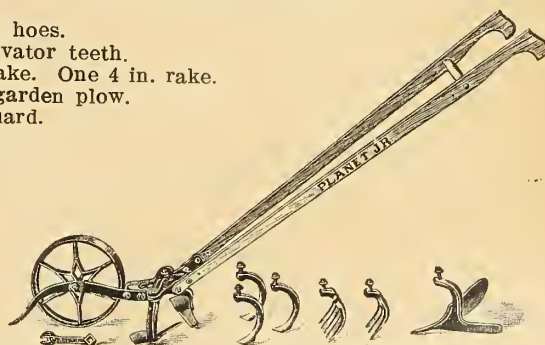
Price, Complete, \$16.50.

As a Seeder, only \$13.00.

The tool combines, in a single convenient implement, a capital hill-dropping seeder, a continuous row seeder, an admirable single wheel hoe, an excellent furrower, a capital wheel cultivator, and a rapid and efficient wheel garden plow. In a word, with a great variety of tools, excellent in design and quality, it is without an equal for easy adjustment, lightness, strength, and beauty. It is a practical, every day, time, labor, and money saver. It sows in continuous rows with great uniformity, and drops with accuracy in hills, 4, 6, 8, 12 or 24 inches apart. **THE FEED IS AUTOMATICALLY STOPPED** by raising the handles, and started by lowering them.

No. 16 Planet Jr. Single Wheel Hoe Cultivator Rake and Plow

Two 6-inch hoes.
Three cultivator teeth.
One 7 in. rake. One 4 in. rake.
One large garden plow.
One leaf guard.



Single Wheel Hoes.

Price, as in cut.....\$8.50

Packed weight, 29 lbs.

Never have hand seeders and wheel hoes been appreciated as they are to-day, and never has the necessity for such tools been so urgent and their value better determined.

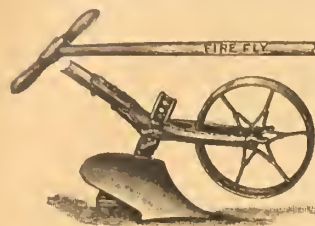
Every garden should have Planet Jr. Tools for labor saving and to enable one to grow larger and better crops.

Garden Tools—Continued

Fire-Fly Garden Plow

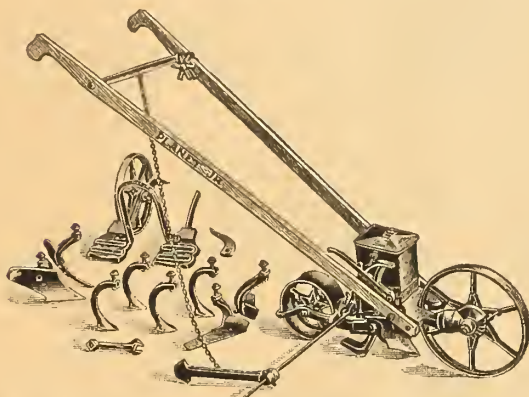
Packed weight, 13 lbs.

This tool is exceedingly useful to owners of small gardens. It will throw a furrow four to six inches wide and one to three inches deep, and deeper by going twice. Furrows for manure or seeds can be opened and covered. In cultivating, plow away, weed and plow back again. This tool will enable a busy man to do in his spare minutes nearly all the work of a family garden. Chicken raisers find it of great advantage in plowing up their scratching yards.



Price.....\$3.50

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow



Holds $2\frac{1}{2}$ quarts. Weight, complete, 64 lbs. It combines in a most practical way the Planet Jr., No. 4 Drill and No. 12 Double-Wheel Hoe. Equipment: One pair of 6 inch hoes. Two pairs of cultivator teeth. Two plows. Two leaf guards.

Price.....\$19.50

This combination is intended for gardeners who have a large enough acreage in crops for a double-wheel hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

As a seeder it is practically the same as the Planet Jr. No. 4; will sow in drills any thickness or drop in hills 4, 6, 8, 12 or 24 inches apart, and has the same feed, hill-dropping mechanism and automatic device for stopping the feed, and has also the new seed index. It is thoroughly substantial and is accurate in planting all kinds of garden seeds in either hills or drills. Feeding may be stopped instantly by raising the handles and also by pushing down the index bar.

The attachment for making up rows for the seed drill as shown in the cut is a great labor-saver when fertilizers are to be used. First make the furrow with the two plow points together, lining out the next row with the marker.

The change from drill to wheel hoe and back again is quickly made, and the entire combination is one we can heartily recommend and guarantee satisfactory.

No. 17 Planet Jr. Single Wheel Hoe



Equipment: One pair 6 inch hoes. Three steel cultivator teeth. One large garden plow. Packed weight, 23 lbs.

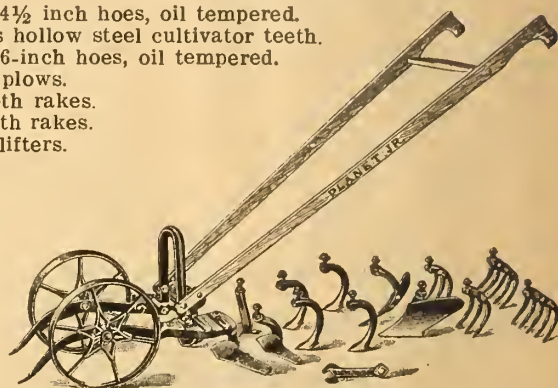
Price, as in cut.....\$7.00

No. 11 Planet Jr. Double Wheel Hoe

Price, with Attachment, as in cut.....\$13.50

Packed weight, 37 lbs.

One pair $4\frac{1}{2}$ inch hoes, oil tempered.
Two pairs hollow steel cultivator teeth.
One pair 6-inch hoes, oil tempered.
One pair plows.
Two 3-tooth rakes.
Two 5-tooth rakes.
Two leaf lifters.



Single Wheel Hoe

This is one of the best light all-round tools in existence; has extra high wheel, making it light running.



Price, including Seven Tools.....\$5.50

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FARMING IMPLEMENTS

GENUINE OLIVER CHILLED PLOWS

The No. 11 James Oliver Sulky Plow

Made Right and Left Hand

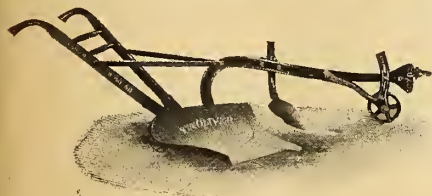
Have you ever noticed that the farmer who takes pride in his field and who plows it with an ordinary three-wheeled sulky plow, finds it necessary to finish up the last four or five furrows with a walking plow? If you ever saw a farmer with a No. 11 James Oliver Sulky Plow do this, you can put it down that he took it so easy in plowing the major part of the field that he was ashamed of himself, and finished up with a walking plow to ease his conscience, for there is no other reason why he should depend upon some other plow to finish what the No. 11 started, and the No. 11 never hesitates to start in any field. It is the only three-wheeled plow made—remember that—on which the trucks can be narrowed by the operator so that in plowing the last furrow, both wheels will run in the dead furrow, finishing up the field just as neatly and cleanly as the first.

Price, upon application.

Oliver Steel Beam Plows

All the strong features of the Oliver Wood Beam are incorporated in the Steel Beam Plow. Light draft is one of its strong points. Scouring in all kinds of soil is another equally valuable requisite.

We cannot too highly recommend the Oliver Steel Beam Plow. It makes friends wherever it is sold.



Rolling Coulter\$5.25

The S-29 Chilled Subsoil Plow

This plow can be used as a subsoiler or as a middle-breaker, by attaching double mould-board, which is made in one piece out of chilled metal, thus giving the buyer two plows at the cost of one, and that at a very low price.

No. S-29 Steel Beam, without mouldboard, capacity 9x4 in. Price.....\$12.50

No. S-29 Steel Beam, with mouldboard, capacity 9x13 in. Price.....\$14.00

All Jointers, \$3.50 extra. All Wheels, \$1.75 extra.

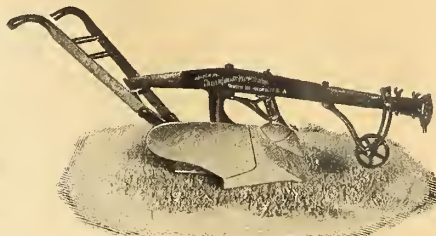
We carry repairs for the Oliver Chilled Plows in stock.

Genuine Farmers' Friend Plow

No. 5\$5.00
No. 7-R7.50

CAN ALSO FURNISH SYRACUSE PLOWS. WE CARRY A FULL LINE OF SPRACUSE PLOW REPAIRS.

The Oliver Plow was introduced into this section more than thirty-five years ago, and is still the standard. The fact can be testified to by all of the farmers who have used them. The word Oliver is a synonym for excellence.



PLOWS—PRICES

STEEL BEAM—RIGHT AND LEFT HAND

No. A-1 and A-2 Right Hand Only.....	\$11.00
No. B, Right Hand Only.....	12.50
No. 10	16.00
No. 13	18.00
No. 19, Right and Left Hand.....	19.00
No. 20, Right and Left Hand.....	20.00
No. 40, Right and Left Hand.....	22.00
No. 40 XX, Right and Left Hand.....	22.00

The above are also furnished in Wood Beam.
All Wood Beam Plows \$1.00 less.

NOTE.—A Clevis, Wrench and an extra share are included in prices for Plows fitted with Cast Shares, but wheels and jointers are not.

Kentucky Plows

Pony Kentucky, wood beam (Includes extra share).....	\$5.00
Pony Kentucky Share .....	.50
Pony Kentucky Landside .....	.25

We have a full line of repairs for Kentucky Plows and Farmers' Friend Plows on hand.

Plow Handles

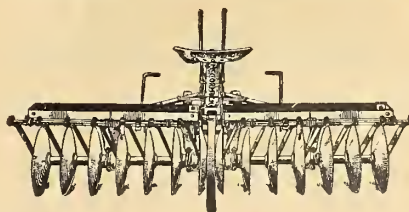
Planed and Finished

	Per pair
1 1/8 in. x 2 in., 5 feet long.....	.40c
1 1/4 in. x 2 1/4 in., 5 feet long.....	.45c
1 1/2 in. x 2 1/2 in., 5 feet long.....	.55c

MALLEABLE CLEEVES, SHACKLETS, TWISTED AND STRAIGHT MALLEABLE PLOW RINGS AND OPEN LINKS.

Full line of Bolts for all Plows.
Prices on application.

Single Discs Harrows



Price, with Fore Truck, 8-16 in. Disc.....	\$42.50
Price, with Fore Truck, 10-16 in. Disc.....	47.50
Price, with Fore Truck, 12-16 in. Disc.....	50.00

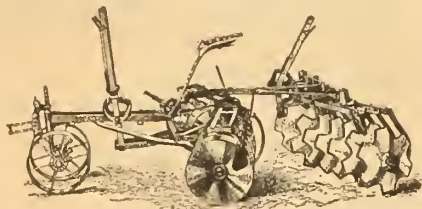
A full line of extra teeth and parts in stock.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Farming Implements—Continued

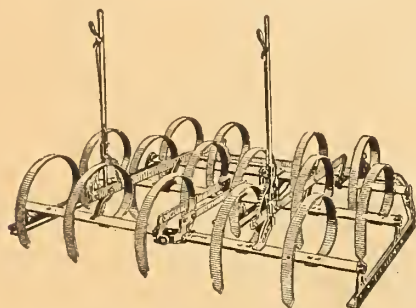
Double Disc Harrow With Flexible Frame

The Double Disc Harrow is just what its name indicates—two harrows combined in one, for the purpose of saving time and labor in tilling the soil. Its capacity is twice that of any other form of Disc Harrow, for it works the ground twice at one operation. One man and three horses operate the Twenty Disc, doing as much work as could be done with two ordinary harrows employing two men and six or eight horses. Moreover, the work is more thoroughly done, for the second harrowing follows immediately after the first, before the freshly cut ground has had time to dry out or become hard.



Price, with Tongue Truck.....\$75.00

Spring Tooth Harrow



Deering, 15 tooth, with Runners.....\$22.50
Deering, 17 tooth, price with Runners..... 25.00
Deering, 21 tooth, with Runners..... 26.50
Deering, 23 tooth, price with Runners..... 27.50

Spike Tooth "U" Bar Zig-Zag Harrows

Closed End

This is a practically all steel implement. The Steel "U" Bars, Teeth and Clips are exactly the same. The outside frame is made of channel steel and the tooth bars are riveted to it by means of steel rivets. This construction gives protection to the tooth bars and prevents injury by their coming



In contact with stumps, fences or other obstructions. It also affords protection to trees when the Harrow is used for orchard work.

All teeth are 5-8-inch steel.

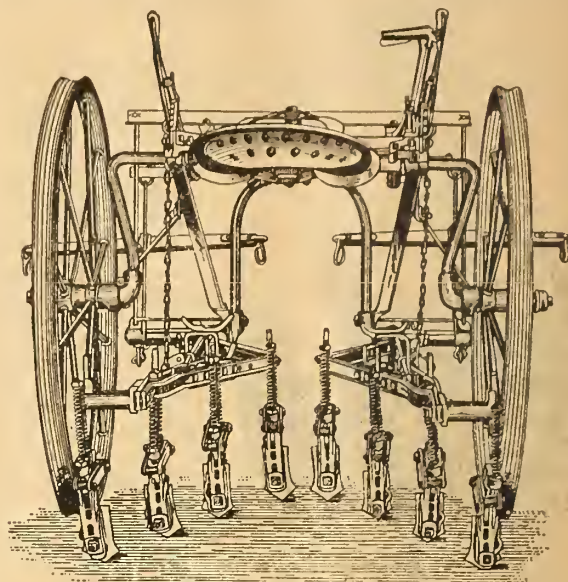
50 Tooth, 2 Section\$21.50
60 Tooth, 2 Section 22.50

One section of the above may be used for garden or light work with one horse.

One Section of 50 Tooth Harrow.....\$11.00

Oliver Riding Cultivator

When the first descriptive circular of the Oliver Cultivator was written, upon entering the race where so many were competing, it was done with a feeling of confidence that the cultivator would prove to be a universal favorite.



Automatic Balance Frame. The movement of one lever assisted by the team raises and lowers both gangs, and at the same time balances the frame.

For narrow rows, the wheels can be set 38 inches between the tires and still give ample room for guiding where planting has been done badly out of check.

As a hard ground cultivator it has no equal. There are no springs or high hitch to draw the shovels out of the ground, which are, therefore, always hungry for their work.

It is a profitable cultivator for the farmer, as it does not wear out easily, never breaks, saves time and manual labor, and does faster and better work than is possible with any other.

Price—8 Spring Shovels\$62.50

The Buckeye Pivot Axle Riding Cultivators

Pressure of the foot on the foot-lever turns the wheels and moves the beams at the same time, thus shifting the entire cultivator instantly in the desired direction.

Space between beams can be instantly changed while the machine is in motion, by a convenient spacing lever.

Single tongue; square tube steel frame; forty-two inch steel wheels; spring pressure; steel seat adjustable for length and height; drop-hitch directly connected with beams; height of arch, 34 inches; adjustable arch.

Especially adapted to crooked rows and hillside cultivation.

Price, with 6 Spring Shovels.....\$60.00

Buckeye Walking Cultivator

The Buckeye Balanced Frame Walking Cultivator with parallel beams has many new and improved features, making it far superior in every way to any other cultivator of this style on the market.

The steel axle is of one continuous piece, giving it great strength.

Perfectly balanced. Light and neat in appearance.

Steel wheels, 30 inches high, double tongue.

Flat steel lifting springs.

Price, 4 Spring Shovels.....\$40.00

Price, 6 Spring Shovels..... 44.00

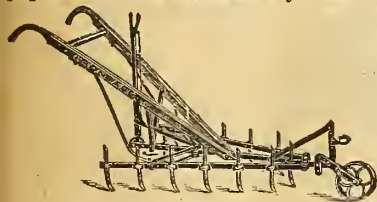
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

IRON AGE CULTIVATORS

Combined Harrow and Cultivator

Farmers in all parts of the country have found this tool to be "right" in every way, and it has always been very popular. It is extensively used in cultivating sugar beets.

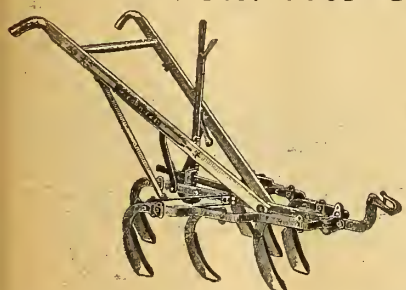
The teeth are steel, diamond shaped, with a small cultivator point forged on one end. They are adjustable for depth and angle. For very close work, every other tooth (or as many as you please) can be quickly removed.



Price, Plain\$7.60
Price, with Lever Expander.....\$8.60

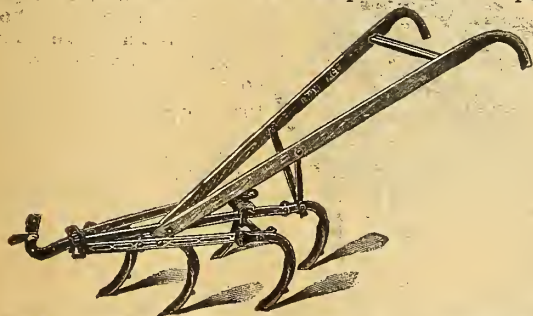
Our No. 1005 Cultivator

Is a plain five-tooth cultivator. It is sold largely in sections of the country where laborers are careless or do not know how to handle the tools—where a strong, rigid, cheap tool is needed.



Price, Plain.....\$6.50
Price, with lever expander 8.00

This cut represents our No. 37 Cultivator, for use in light, sandy soils. Is built on the same lines as our regular No. 1 Cultivator. Is fitted with wheel clamp expander. Opens to

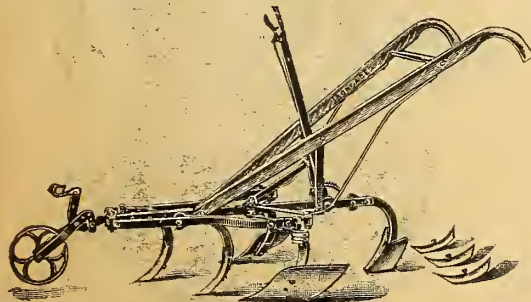


20 inches and closes to 9 inches. This is our leader, and is sold at the

Special price\$5.00

No. 600 Horse

An up-to-date tool for the Twentieth Century farmer who wants quick, thorough work and a machine that can be adapted to the necessary operation to produce a first-class crop.

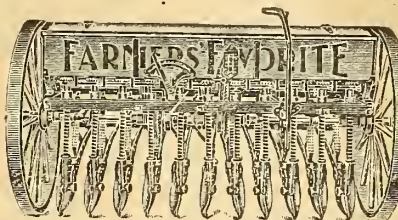


Price.....\$11.50

Bickford & Huffman, or Farmers' Favorite Grain Drill

Too well known to need much comment. Ask for special catalogue.

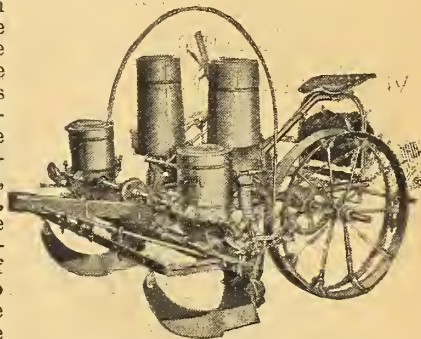
Both the grain and fertilizer are positive force feeds, and will sow with absolute regularity any kind of grain or fertilizer in good condition. The grass seeder is also a force feed, and can be used either in front or rear of the hoes; also quantity can be changed to any amount necessary. It is fastened on the frame and very low down, thus preventing the wind from blowing the seed away before reaching the ground. The fertilizer feed can be stopped or started at any time while the drill is in motion, which makes it convenient in case the operator does not wish to sow fertilizer while going over good ground.



Also Lime and Fertilizer Distributors, Alfalfa and Grass Seed Drills. Evans Potato Planters, Iron Age Potato Planters, Iron Age Potato Diggers, Hoover Potato Planters, Hoover Potato Diggers.

Superior Corn Planters

Every farmer who raises corn desires each succeeding year more corn from the same acreage. There are many contingencies which may, and do, effect results. All are agreed that much depends upon the seed, accuracy of planter, and soil conditions. The latter, of course, is entirely in the hands of the farmer, so also might we say of the seed, but the machine behind the team is the



one proposition of which is demanded Jury Trial. The Superior Corn Planter has been thoroughly tried in all corn-raising sections, proving the worthiness of the name it bears. The quality went in before the name went on. The Superior Corn Planter possesses new features—good sensible helps for the user. Adjustable in width, in 2-inch steps, from 28 inches to 48 inches.

Price on application.

Extra Check-Row Wire in 10, 20, 40, and 80 rod lengths,
per rod 7c

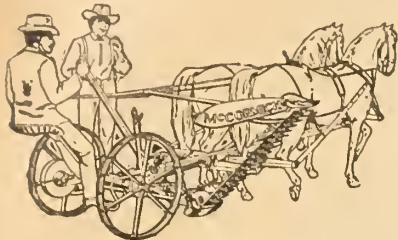
Corn Planter Runners for all popular planters.
Price, per pair for Superior Steel Runners.....\$6.00

Due to the continual change in the prices of machinery and farm supplies, it is impossible to quote prices on many things. All orders will be filled at the lowest market price.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

MCCORMICK

McCormick Vertical Lift Mower



The McCormick Vertical Lift Mower has been designed for cutting on rough and stumpy ground, where a plain lift mower could not be used to good advantage. This mower is a practical machine for all kinds of grass cutting. The cutter bar

can be raised to a vertical position and lowered without stopping the team. When the bar is raised, the machine is thrown in and out of gear automatically.

Prices upon application.

McCormick Little Vertical Mower

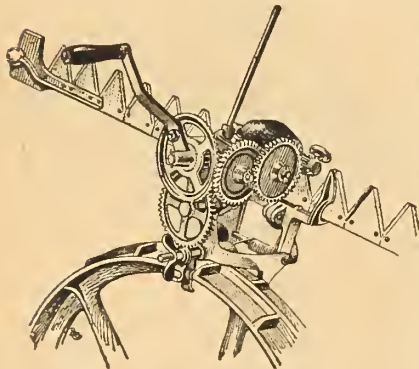
The McCormick Little Vertical Mower has been designed to meet the demand for a mower of small capacity that can be pulled by one horse. It is adapted for mowing lawns, parks, orchards, and cemeteries, because it can be operated in places where a large two-horse machine could not go.

Prices upon application.

McCormick Self-Dump Hay Rake

McCormick Hay Tedder

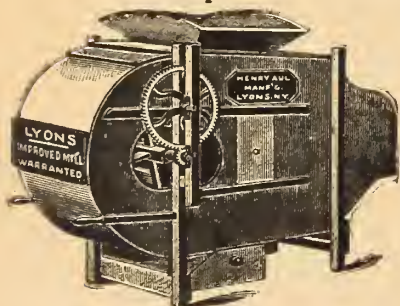
McCormick Knife and Tool Grinder



Prices upon application.

This device is convenient for use in the work shop or in the field, as it can be readily attached to a bench or mower wheel. A cylindrical stone for grinding tools is furnished on special order. A stone for gumming saws can also be furnished on special order. When desired a foot power attachment will be supplied at a small additional cost. With wheel for grinding mower sections.

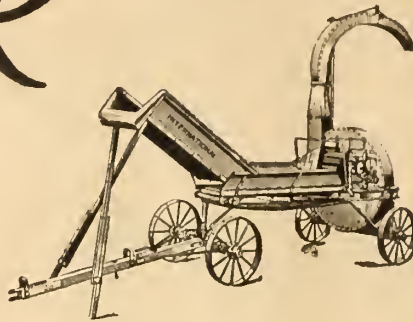
Improved Grain Fans



Aulds complete, with necessary sieves for all forms of seed..\$25.00

Lyons', handmade, complete, with necessary sieves for all forms of seed\$30.00

International Ensilage Cutters



These Cutters are strongly built, made of first-class material throughout, and are designed with a view of getting the best results with least power and strain on the working parts.

Ask for Special Catalogue and Prices.

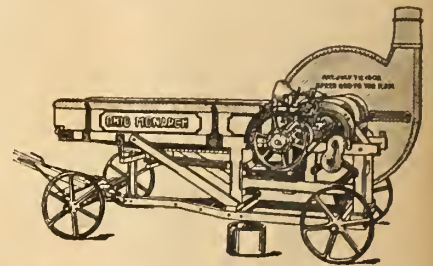
The Special Catalogue will give you detailed information as to why you should buy an I H C Cutter.

"Ohio" Monarch Self-Feed Silo Filler

Ranks at the head of the list of Ensilage Cutters.

Get a Monarch and the Silo question is easy.

Ask for a Special Catalogue giving different sizes, etc.



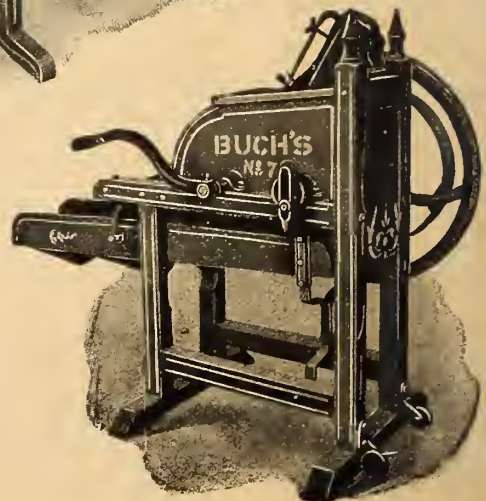
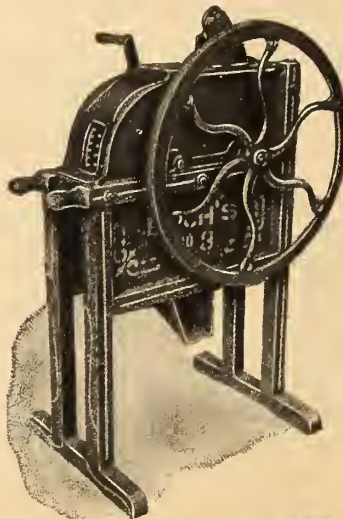
Corn Shellers

Our No. 3 One-Hopper Sheller, with cob separator and sieve, is one of the best hand shellers ever offered. Specially adapted to large corn.

Price on application.

Our No. 7 Two-Hopper Sheller, with adjustable shaker, which separates the cob from the corn and chaff from the corn, made for hand and power, furnished with combined fly-wheel and 20-inch pulley.

Price on application.



PUMPS

Myers Force and Lift Pumps for Deep and Shallow Wells

Construction and Durability.

The material used in the construction of the Myers Pump is the best that can be bought for the purpose. The stand is made of the best cast iron and steel. The cylinders are seamless drawn brass or brass lined iron; the latter is always recommended where it can be used, as it combines wearing quality and strength. The valve seat is of glass, which is positively noncorrosive and will not harden the leather, a feature belonging absolutely to the Myers Pump, and without which no pump can be perfect. The check valve is of poppet style, which rises clear of the seat at each stroke of the pump, allowing it to clear itself perfectly; the old style hinge valve is out of date. Buckets and valves are made from the best oak tanned leather, all cut to an exact thickness and pressed dry by means of our patented process. The reason a great many pumps do not give satisfaction is because the manufacturer use cheap leather of an uneven thickness.

There is no reason why a pump will not give satisfaction and last for years if constructed as above.

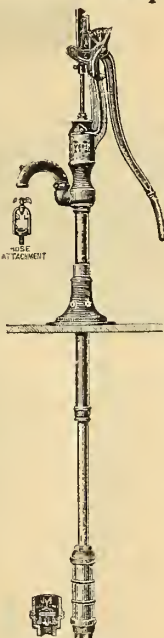


Fig. 1108

The Myers Ratchet Handle Force and Lift Pump

With Adjustable Base and Wrought Steel Handle Has Patent Glass

Valve Seat and Poppet Valve.

Fig. 1108. represents our new Lift Pump with cog gear or ratchet handle. This style handle is especially adapted to deep well work, owing to the advantage of the superior leverage with short fulcrum and long handle.



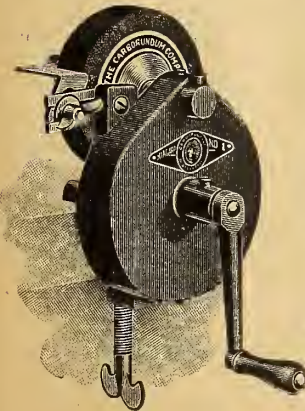
Carborundum Niagara Grinders

Carborundum Stones are made of Carborundum, the most marvelous abrasive the world has ever known. It is as hard and sharp as the diamond. The stones being manufactured, the uniformity of the grit, and cutting qualities, as well as absolute uniformity in hardness are insured.

The rapidity with which the work is accomplished, the satisfaction of having it promptly done, and the pleasure of having a stone sharp and clean, never glazed or filled, always ready for service, outweigh many times the slightly-increased expenditure for these stones.

Prices:

No. 1	\$2.50
No. 2	3.50
No. 3	5.00
No. 4	8.00



Price List, Represented by Fig. 1108

Fitted with Brass-Lined Cylinders and Glass Valve Seat—Four Foot Set Length.

No. R152—Capacity 440 gallons per hour. Has a 3-inch cylinder, tapped for 1¼-inch pipe.

Price for No. 152 Lift on application.

Price for No. 172 Force on application.

The distance from the bolt under the handle to the piston-rod is 3 inches, with an 8-inch stroke, as against 5½ inches on the ordinary pump with 6-inch stroke.

The Myers Branch Pipe Force Pump

A Favorite and Reliable Anti-Freezing Force Pump

The pump is equipped with our improved glass valve seat, patent expansive plunger bucket and adjustable base plate. The air chamber is much larger than in any other pump, causing it to throw the most even flow of water from the spout and making it a superior pump for throwing water with hose. The large air chamber cushions the stream so perfectly that this pump has become a great favorite with our dealers.

Brass-lined cylinders; each pump furnished with hose attachment and strainer. With patent adjustable base and union spout.

For wells from 10 to 70 feet deep. Will go in a 5½-inch cased well.

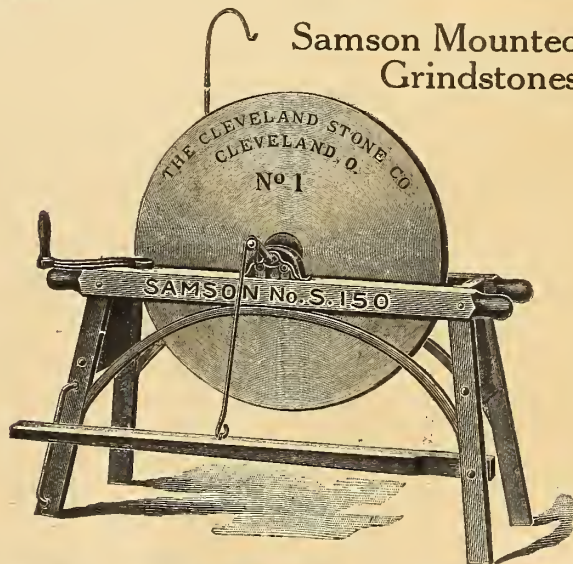
No. R32 (Ratchet Head) complete, price on application.

For windmill head, add to list, 75c.

Myers' special steel sucker rod.

Price of pipe, 1¼ inch galvanized in and outside, fitted complete for any depth well, on application. We have a special pump man, who will attend to your wants and guarantee his work.

Samson Mounted Grindstones



This is a splendid stone for farm purposes. Frame made of hardwood; operated by one pedal.

No. 3, Stone about 18 inches diameter.....\$6.00

No. 2, Stone about 22 inches diameter..... 7.00

THE AUTO GRINDSTONE

has a steel frame and is ball-bearing, and is operated with two pedals, making it very light running. Stone about 18 inches diameter.

Price.....\$8.00

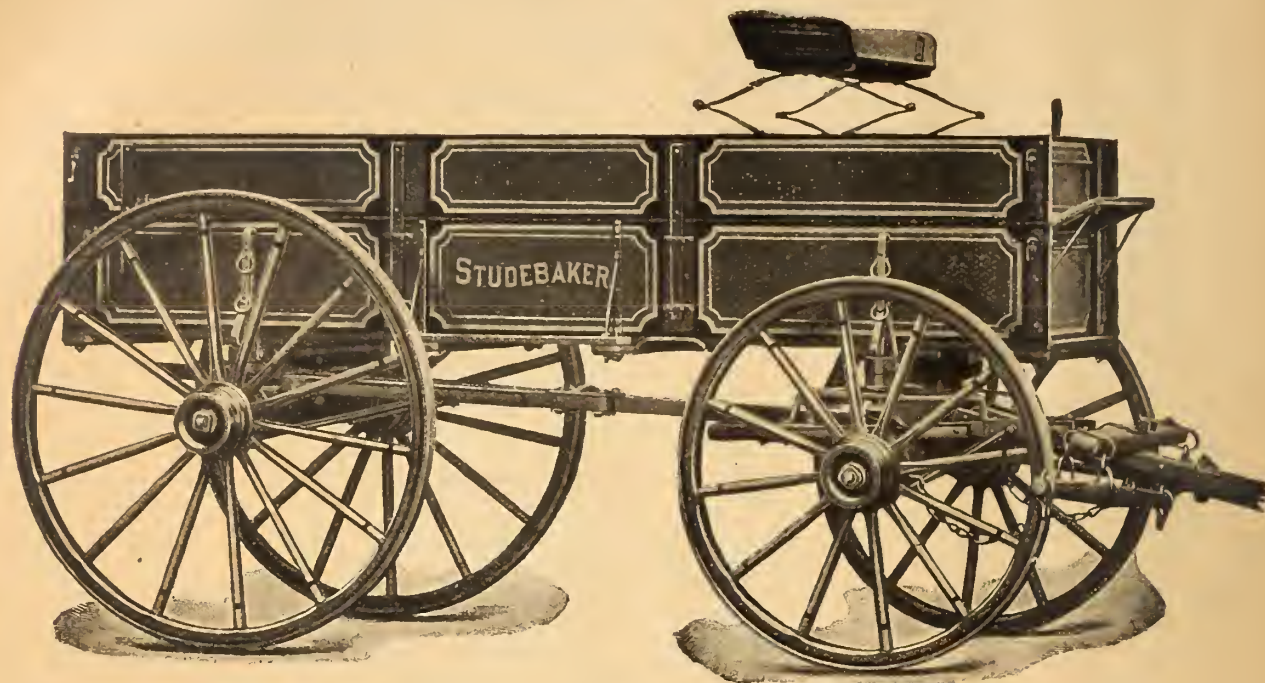
We carry a full line of loose stones of all sizes. Price, 3 cents per pound.

Also a line of Grindstone Mountings.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

STUDEBAKER WAGONS

Quality Supreme



Standard Thimble Skein Wagon. Made In Steel Axle

Every piece of material that goes into a Studebaker wagon has the Studebaker reputation behind it.

The house of Studebaker jealously guards the quality of the vehicle that bears its name.

Only the very finest materials is used, and at every turn inspectors are on the lookout.

Every process of construction is under expert supervision—nothing anywhere is left to chance.

Standard Thimble Skein Farm Wagon With Coach Tongue

Sizes of Skins	Height of Wheels				Size of Tire	Dimensions of Box				Approximate		Wagon Complete with Bra	Gear Only with Brake	
	Front		Hind			Lower Top		Length		Weight	Capacity			
	Inches	Ft.	In.	Ft.	In.	Inches	In.	In.	Ft.	In.	Pounds	Pounds	List Price	List Price
2¾x8	3	8	4	4	2 x7-16	12	8	10	0		850	3000	\$101.50	\$77.00
2¾x8	3	8	4	4	2½x7-16	12	8	10	0		850	3000	104.50	79.50
2¾x8	3	8	4	4	3 x3-8	12	8	10	0		850	3000	106.00	82.50
3 x9	3	8	4	6	2 x1-2	13	8	10	6		1000	4000	104.50	79.00
3 x9	3	8	4	6	2½x1-2	13	8	10	6		1000	4000	109.00	83.50
3 x9	3	8	4	6	3 x1-2	13	8	10	6		1000	4000	112.00	86.00
3¼x10	3	8	4	6	2 x5-8	14	10	10	6		1100	5000	109.50	83.00
3¼x10	3	8	4	6	3 x1-2	14	10	10	6		1100	5000	118.00	91.50
3½x11	3	8	4	6	2 x3-4	16	12	10	6		1250	6000	118.50	91.50

Farmer's Handy Truck—Wide Track. Cast Skeins Only

(With Wood Wheels.)

Price, with double and single trees.....\$55.00

Woolf & Co.'s Farm and Contractor's Cart

With 5 and 6 inch tires; also extra heavy Contractors' Carts made specially to order when wanted. These carts are very strong heavily ironed, nicely painted striped and varnished.

Size of Axle.	Size of Tire.	Diameter of Wheels.	Price.
1 1/2 inches	3 inches	4 ft. 10 in.	\$47.50
1 1/2 inches	4 inches	4 ft. 10 in.	50.00
2 inches	3 inches	4 ft. 10 in.	55.00
2 inches	4 inches	4 ft. 10 in.	60.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FERTILIZER

As is well known, the chemical markets are in such an unsettled condition that it is hardly possible to predict just what the fertilizer situation may be. We expect to be in as good or better position to take care of our trade than many other dealers because of our factory connections. It would be well to see us before concluding your arrangements along this line.

C. M. Woolf & Co.'s Special Brand Pure Raw Bone

Finely ground, which makes it act more quickly, thereby making it a very fine article for spring use.

Analysis: Ammonia 2.50 per cent. Phos. Acid, 20 per cent. Bone Phosphate, 50 per cent. Prices on application.

Woolf & Co.'s Corn and Oats Fertilizer

We recommend this specially prepared fertilizer for corn and oats. Its use will greatly increase the yield.

Guaranteed Analysis.

Ammonia	1.00
Avail. Phosphoric Acid	8.00
Potash (Available)	1.00

Prices on application.

Plant Bed Guano

Guaranteed Analysis:

Ammonia .....	.5%
Phosphate Acid (available) .....	.7%

Special Tobacco Guano

Guaranteed Analysis:

Ammonia .....	.3%
Phosphate Acid (available) .....	.8%
Potash .....	.2%

Gilt Edge Compound

Guaranteed Analysis:

Ammonia	1¼%
Phosphate Acid (available) .....	.8%
Potash .....	.2%

General Phosphate

Guaranteed Analysis:

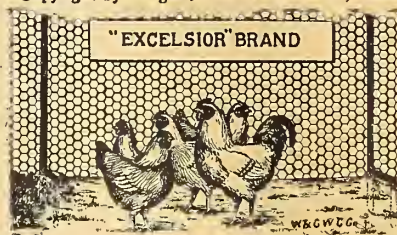
Ammonia	2½%
Phosphate Acid (available) .....	.8%
Potash .....	.1%

Different other brands for truck, corn, oats, etc., can be furnished.

Poultry Netting—Galvanized After Weaving

No. 20 Wire.

Copyright by Wright & Colt n W. C. Co., 1899.



1 foot, 2 inch mesh, 150 lineal feet, per roll	\$1.50
2 feet, 2 inch mesh, 150 lineal feet, per roll	2.75
3 feet, 2 inch mesh, 150 lineal feet, per roll	3.75
4 feet, 2 inch mesh, 150 lineal feet, per roll	4.75
5 feet, 2 inch mesh, 150 lineal feet, per roll	6.00
6 feet, 2 inch mesh, 150 lineal feet, per roll	7.00
1 foot, 1 inch mesh, 150 lineal feet, per roll	3.25
1½ feet, 1 inch mesh, 150 lineal feet, per roll	4.50
2 feet, 1 inch mesh, 150 lineal feet, per roll	6.00
3 feet, 1 inch mesh, 150 lineal feet, per roll	8.50
4 feet, 1 inch mesh, 150 lineal feet, per roll	11.50

U. S. Poultry Fence

Built on miniature scale of farm fence interwoven with parallel wires and hinge joints so it stretches to posts straight even and nice without buckling, bagging or sagging.

It's so stiff and satisfactory, it does not require top rail and base board or so many posts as old style netting.

Guaranteed 5 to 6 times as strong and at least 100 per cent better in every way. All parallel wires are of even length and all mesh of uniform size. They can't be otherwise the way it's made.

Made in heights from 12 to 72 inches. Galvanized before or after weaving. Put up in 150 foot rolls.

It's not merely a substitute for old style netting. It's something much better. It's the strongest, cheapest, most sightly and best fence for the purpose yet invented.

3 ft., 2 in. mesh	\$3.75
4 ft., 2 in. mesh	5.00
5 ft., 2 in. mesh	6.00
6 ft., 2 in. mesh	7.00



**Raise More Poultry and
Help Win the War!**

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PARTIAL LIST OF GOODS CARRIED IN STOCK AT ALL TIMES

Axes	Cut Worm Killer	Harness	Lanterns	Roofing	Springs, Holster
Axes, Brush	Dairy Supplies	Harrows	Mangers	Rope	Steel Traps
Axle Grease	Dibbles	Harrow, Alfalfa	Manure Spreader	Sausage Stuffers	Steeleyard
Bale Ties	Double and Single	Harrow Points, Re-	Mattocks	Sawing Outfits, Gas-	Tackle Blocks
Barbed Wire	Tree	versible	Meat Chopper	line	Tedders, Hay
Barn Door Tracks &c.	Feed Grinders	Harrow Teeth	Mowers, Lawn	Saws	Thermometers
Barrel Headers	Fencing	Hatchets	Nails	Saws, Pruning	Tools, Garden
Baskets	Food Choppers	Hay Fork Track and	Nose Bags	Saws, Wood and Pole	Torches, Gasoline
Bells, Farm	Foods, Chicken	Parts	Oils	Saw Bucks	Transplanter
Binders, Corn	Forks	Hay Forks	Pails, Milk and Water	Scales	Traps, Mole
Binders, Shock	Fruit Pickers	Hay Loaders	Paints	Scoops	Trellis, Wire
Binders, Wheat	Fruit Presses	Hay Racks	Parers, Apple and	Scrapers, Drag	Troughs, Watering
Blankets, Horse	Fly Nets	Hoists	Peach	Screens	Trowels
Bone Cutters	Fodder Yarn	Hoos	Picks	Screen Wire	Truck, Warehouse
Bridles	Gates	Horse Clippers	Plows, Contractors	Scythes	Twine, Binder
Brooders	Glazing Points	Hose, Rubber	Post Hole Diggers	Scythe Stones	Twine, Bag and Wrap-
Brooms	Gourd	Ice Cream Freezers	Poultry Appliances	Seeders Alfalfa	ping
Brushes	Grafting Wax	Ice Picks	Poultry Supplies and	Seeders, Cherry	Umbrellas, Wagon
Butter Prints	Grinders, Knife	Ice Tongs	Remedies	Seeders, Grass	Vegetable Cutter
Calf Meal	Grindstones	Incubators	Powder Gun or Sifter	Shears, Grass	Wagons
Calf Weaners	Grass Hooks	Insecticide	Presses, Hay	Shears, Hedge	Washing Machine
Cart, Barrel	Halters	Knife, Hay	Pruners, Tree	Shovels	Watering Pots
Chains	Hames	Kettles, Sugar	Pump Jacks	Shellers, Corn	Weeders, Hand
Cider Mills	Hammers	Knives, Asparagus	Rakes, Lawn	Shock Carrier	Wheelbarrow
Coats, Storm	Handles, Axe, &c.	Kohl-Rabi	Rake, Side Delivery	Snaths	Wire Mesh Cloth
Collars, Horse	Handles, Plow	Kraut Cutters	Robes	Spades	Wringers, Clothes
Cookers, Feed		Lacing Belt	Roller, Land	Spraying Nozzles	Yokes
Curry Combs		Ladders	Rollers, Lawn		



TRADE MARK REG. U.S. PAT. OFFICE.



RUBER-OLD ROOFING

Standard for Over Twenty Years

Prices: 1 Ply...\$2.50 2 Ply...\$3.25 3 Ply...\$4.00

Asparagus	1
Asparagus Roots	1
Beans	1-2
Beet	3
Cabbage	4
Calf Meal	22
Cantaloupe	9
Carrot	3
Carts	30
Cauliflower	5
Celeriac	6
Celery	5
Chard, Swiss	4
Churns	22
Collards	7
Corn, Field	17
Corn, Sugar	6
Corn Salad	7
Cow Peas	17
Cress, Water	7
Cucumber	7
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REFERENCE TABLES

Quantity and Seed Requisite to Produce a Given Number of Plants and Sow an Acre

	Quantity Per Acre.		Quantity Per Acre.
Artichoke, 1 oz. to 500 plants.....	6 oz.	Grass, Timothy	1/4 bus.
Asparagus, 1 oz. to 800 plants.....	1 lb.	Hemp	1/2 bus.
Barley	2 1/2 bus.	Kale, 1 oz. to 3,000 plants.....	4 oz.
Beans, dwarf, 1 1/2 pts. to 100 feet of drill.....	1 bus.	Kohlrabi, 1-3 oz. to 100 feet of drill.....	4 lbs.
Beans, pole, 1 1/2 pts. to 100 hills.....	1 1/2 bus.	Leek, 1-3 oz. to 100 feet of drill.....	4 lbs.
Beet, garden, 1 oz. to 100 feet of drill.....	7 lbs.	Lettuce, 1/4 oz. to 100 feet of drill.....	3 lbs.
Beet, Mangel, 1 oz. to 100 feet of drill.....		Martynia, 1/2 oz. to 100 feet of drill.....	4 lbs.
Broccoli, 1 oz. to 3,000 plants.....	4 oz.	Melon, Musk, 1 oz. to 100 hills.....	3 lbs.
Broom Corn	10 lbs.	Melon, Water, 4 oz. to 100 hills.....	3 lbs.
Brussels Sprouts, 1 oz. to 3,000 plants.....	4 oz.	Nasturtium, 2 oz. to 100 feet of drill.....	15 lbs.
Buckwheat	1/2 bus.	Oats	2 bus.
Cabbage, 1 oz. to 3,000 plants.....	4 oz.	Okra, 1 1/2 oz. to 100 feet of drill.....	8 lbs.
Carrot, 1/4 oz. to 100 feet of drill.....	2 1/2 lbs.	Onion Seed, 1-3 oz. to 100 feet of drill.....	4 to 5 lbs.
Cauliflower, 1 oz. to 3,000 plants.....	4 oz.	Onion Seed for Sets	10 to 80 lbs.
Celery, 1 oz. to 15,000 plants.....	4 oz.	Onion Sets, 1 quart to 20 feet of drill.....	8 bus.
Clover, Alsike and White Dutch.....	6 lbs.	Parsnip, 1/4 oz. to 100 feet of drill.....	3 lbs.
Clover, Lucerne, Large Red; Crimson Trefoil.....	8 lbs.	Parsley, 1/4 oz. to 100 feet of drill.....	3 lbs.
Clover, Medium	12 lbs.	Peas, garden, 1 pint to 100 feet of drill.....	2 bus.
Collards, 1 oz. to 3,000 plants.....	4 oz.	Peas, field	2 bus.
Corn, sweet, 1/4 pint to 100 hills.....	5 qts.	Pepper, 1 oz. to 1,500 plants.....	3 oz.
Cress, 1/2 oz. to 100 feet of drill.....	10 lbs.	Potatoes	8 bus.
Cucumber, 1 oz. to 100 hills.....	3 lbs.	Pumpkin, 1-3 qt. to 100 hills	3 to 4 lbs.
Eggplant, 1 oz. to 2,000 plants.....	4 oz.	Radish, 2-3 oz. to 100 feet of drill.....	10 to 12 lbs.
Endive, 1/4 oz. to 100 feet of drill.....	4 1/2 lbs.	Rye	1 1/2 bus.
Flax, Broadcast	1/2 bus.	Salsify, 1/2 oz. to 100 feet of drill.....	8 lbs.
Garlic, bulbs, 1 lb. to 10 feet of drill.....		Spinach, 1/2 oz. to 100 feet of drill.....	8 lbs.
Gourd, 2 oz. to 100 hills.....		Summer Savory, 1 packet to 100 feet of drill.....	3/4 lbs.
Grass, Blue, Kentucky	2 bus.	Squash, Summer, 4 oz. to 100 hills.....	3 lbs.
Grass, Blue, English	2 bus.	Squash, Winter, 8 oz. to 100 hills.....	3 lbs.
Grass, Hungarian and Millet.....	1/2 bus.	Tomato, 1 oz. to 2,500 plants.....	2 oz.
Grass, Mixed Lawn	3 to 5 bus.	Tobacco, 1 oz. to 5,000 plants.....	2 oz.
Grass, Orchard, Perennial Rye, Red Top, Fowl Meadow and Wood Meadow	2 bus.	Turnip, 1 oz. to 250 feet of drill.....	1 1/2 lbs.
Grass, Red Top, Fancy Clean	8 to 10 lbs.	Vetches, with 1 bu. oats or 3/4 bu. wheat	20 to 30 lbs.
		Wheat	1 1/4 bus.

Number of Plants and Trees to the Acre at Given Distance


Distance apart	No. plants	Distance apart	No. plants	Distance apart	No. plants	Distance apart	No. plants
12x 1 inches.....	522,720	24x24 inches.....	10,890	36x36 inches.....	4,840	60x60 inches.....	1,743
12x 3 ".....	174,240	30x 1 ".....	209,088	42x12 ".....	12,446	8x 1 foot.....	5,445
12x12 ".....	43,560	30x 6 ".....	34,848	42x24 ".....	6,223	8x 3 ".....	1,815
16x 1 ".....	392,040	30x12 ".....	17,424	42x36 ".....	4,148	8x 8 ".....	680
18x 1 ".....	348,480	30x16 ".....	13,068	48x12 ".....	10,890	10x 1 ".....	4,356
18x 3 ".....	116,160	30x20 ".....	10,454	48x18 ".....	7,790	10x 6 ".....	726
18x12 ".....	29,040	30x24 ".....	8,712	48x24 ".....	5,445	10x10 ".....	435
18x18 ".....	19,360	30x30 ".....	6,970	48x30 ".....	4,356	12x 1 ".....	3,630
20x 1 ".....	313,635	36x 3 ".....	58,080	48x36 ".....	3,630	12x 5 ".....	736
20x20 ".....	15,681	36x12 ".....	14,520	48x48 ".....	2,723	12x12 ".....	302
24x 1 ".....	261,360	36x18 ".....	9,680	60x36 ".....	2,901	16x 1 ".....	2,722
24x18 ".....	15,520	36x24 ".....	7,260	60x48 ".....	2,178	16x16 ".....	170

Weight of Various Articles per Bushel

	Pounds		Pounds
Apples	48	Malt	38
Blue Grass	14	Oats	32
Apples, dried	22	Onions	54
Barley	48	Peaches dried	28
Beans	60	Peas	60
Buckwheat	44	Rye	56
Broom Corn	46	Timothy Seed	45
Bran	20	Wheat	60
Clover Seed	60		
Corn, Shelled	56		
Corn, on ear	70		
Corn Meal	50		
Cranberries	40		
Flax Seed	56		
Hemp Seed	40		
Hungarian Grass Seed	48		
Irish Potatoes	60		

Weight per Cubic Foot

Hay well settled	4 1/4
Corn on cob, in bin	22
Corn shelled, in bin	45
Wheat, in bin	48
Oats, in bin	25 1/2
Potatoes, in bin	38 1/2



BURPEE'S
STRINGLESS
GREEN POD
BEANS



C. M. Woolf & Co.
INC.

1005 B. ST., NW. WASHINGTON, D. C.